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UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

AN EXPLORATION OF LATINO STUDENT ACCESS TO
ADVANCED PLACEMENT CURRICULUM

A dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education

Susan Ann Walker

College of Education and Behavioral Studies
School of Educational Research
College of Educational Leadership and Policy Studies

May, 2013

This Dissertation by: Susan Ann Walker

Entitled: *An Exploration of Latino Student Access to Advanced Placement Curriculum*

has been approved as meeting the requirements for the Degree of Doctor of Education in the College of Education and Behavioral Sciences in the School of Educational Research, Leadership, Program of Educational Research

Accepted by the Doctoral Committee

Linda Vogel, Ph.D., Co-Chair

Spencer Weiler, Ph.D., Co-Chair

Madelin Milian, Ed.D., Faculty Representative

John Stewart, Ed.D., Committee Member

Date of Dissertation Defense _____

Accepted by the Graduate School

Linda Black, Ed.D.
Acting Dean of Graduate School & International Admission

ABSTRACT

Walker, Susan Ann. *An Exploration of Latino Student Access to Advanced Placement Curriculum*. To be published Doctor of Education dissertation, University of Northern Colorado, 2013.

Determining how to provide a quality education for underserved students in the United States is a dilemma for educational leaders. In particular, high poverty Latino students are the least educated group in America. This qualitative study used data from focus group transcripts and school records to complete a comparative case study to explain how Latino students experienced the access to and equity in Advanced Placement (AP) coursework.

Nine Latino students and eight White students from one high school participated in eight semi-structured focus groups based on ethnicity, grade level, grades in AP classes, and grade point averages. Triangulated data from focus groups transcripts, researcher notes, and students' academic records revealed differing academic experiences for Latino students as compared to White students at the participating high school. The results of this study exposed systemic structures and educational practices that negatively impacted Latino student enrollments in Advanced Placement programs at the participating high school.

Major findings in the research included knowledge gaps among students and parents regarding the purpose and benefits of the AP program, ability tracking and differing AP program preparation, misdirected teacher beliefs and inequitable AP

enrollment policies, and a lack of study session and support opportunities. Differing academic outcomes for Latino students in this study resulted in the development of a model that could support increased access to and equity in AP programs for all students.

ACKNOWLEDGEMENTS

Many influential people encouraged me to pursue my academic goals. First and foremost, the love and support of my parents, Pat and Jack Runyan, inspired a lifetime of learning. They taught me to follow my dreams with honesty, passion, and loyalty. My parents modeled courageous behavior and instilled the importance of fearlessly facing difficult situations. As a veteran in the United States Air Force, my father heroically defended our country's freedom. In recent years, my father bravely faced death from cancer and taught us how to die with dignity and strength. He is my hero. My mother continues to demonstrate courage and character as she learns to navigate life without her companion of 60 years. Their incontrovertible principles shaped my character and guided my pathway in life.

Next, I would like to thank the following family and friends. My husband, Tom Walker, continually encouraged me to continue to fulfill my academic goals. He believed in me even when I was discouraged and uncertain as to whether I had the ability and energy to complete this journey. His faithful support is the main reason I was able to complete this work. My amazing daughters, Heather Blackwell, Amy Zulauf, and Chelsey Walker, motivated me to persevere and believed that the work made a difference. They will forever be my motivation to continue to work towards a more equitable educational system. My sister, Terri Runyan, endured numerous versions of my plans to complete this program, was never judgmental, and always supported me, even

when the timeline for completion constantly changed. My long-time friend, Patsy Richard, initially thought I was crazy to attempt this program, but has supported me throughout the process. My supervisor and friend, Kathi VanSoest, exemplified quality leadership and her direction changed me professionally me and personally. The District's Chief Academic Officer, Nancy Devine, offered key advice in forming the research questions and final recommendations for this project. Finally, I would like to thank my friend and research partner, Laura Pearsall, for believing in me and encouraging my passion for social justice.

In the end, I am most grateful for the support of my dissertation committee. I would like to thank my research advisors, Dr. Linda Vogel and Dr. Spencer Weiler, for their patience, honest evaluations, and expert suggestions in the process of completing my doctoral program. From the initial cohort class to this final project, their honest recommendations and high expectations made the work more applicable for positive change. I am also thankful for my committee member, Dr. Madeline Milian, who shaped the direction of the study with her compassion and provided a critical perspective in this meaningful work. Lastly, I want to thank my final committee member, whose encouragement is the reason I started this process. The courage to begin this journey came from the guidance of Dr. John Stewart. As a mentor and friend, his leadership inspired me to take the initial step in a new direction that ultimately changed my life forever.

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CHAPTER I

UNDERSTANDING THE OPPORTUNITY GAP

Public schools across America strive to provide all students with a quality education and the opportunity to achieve the American Dream. However, the opportunity to achieve that dream is frequently associated with social class and racial privilege (Gándara & Contreras, 2009; Riegle-Crumb, 2010; Singleton & Linton, 2006). As the faces of American communities become increasingly disparate, school systems search for ways to educate a new generation of diverse students. In particular, the Latino population has increased dramatically in the United States over the past 30 years; yet, according to the National Center for Education Statistics (2011), Latinos are the least educated population with the lowest college completion rate of all ethnic groups in America. With approximately half of all Latino students failing to earn a high school diploma, the gap between those with postsecondary education and those without perpetuates generational poverty (Gándara & Bail, 2001). Determining how to adequately provide a quality kindergarten through college education for underserved youth is a considerable issue faced by educational leaders across the nation (Gándara, 2010; Goodwin, 2010).

Many factors determine college admission and increased postsecondary degree attainment. One strong indicator is successful completion of rigorous high school Advanced Placement (AP) courses which raise postsecondary admittance and enhance college financial options (Kyburg, Herthberg-Davis, & Callahan, 2007; Riegle-Crumb,

2010; Santoli, 2002; Solorzano & Ornelas, 2004). While some progress in academic growth for Latino students has been made, in reality, the modest gains have not kept pace with the demographic growth (Aud, Fox, & Kewal, 2010). Failure to create educational systemic practices that offer access to AP programs for all students likely inhibits students, particularly Latino students, from reaching their academic potential.

Historical differences in academic achievement due to race continue to be a difficult dilemma for educational leaders (Singleton & Linton, 2006). Although numerous studies have verified the positive impact of Advanced Placement classes, a deficiency exists in research encompassing the Latino high school students' personal experience in their pursuit of advanced academic pathways (Dredger, 2008; Martinez & Martinez, 2004). This study will focus on the contributory factors surrounding the underrepresentation of Latino students in Advanced Placement programs. The goal of this study is to provide support to educational leaders in understanding the barriers to enrolling in AP courses for Latino high school students. Specific insight into current policy, procedures, process, and practices regarding what schools can do to increase the access to and equity in high school Advanced Placement programs will be the focus of the findings.

Personal Philosophical Framework

Enhanced by over 25 years of work experience in education, my philosophy is grounded in the belief that America's future depends upon an educational system that provides all students with the learning opportunities needed to realize their personal goals and dreams. During the last 13 years, I have worked in schools with a large percentage of high poverty Latino students. Discovering the challenges involved in teaching high

poverty students changed me as an educator. Working with underrepresented student populations in my AP classes caused me to question my previously successful teaching practices that no longer seemed effective.

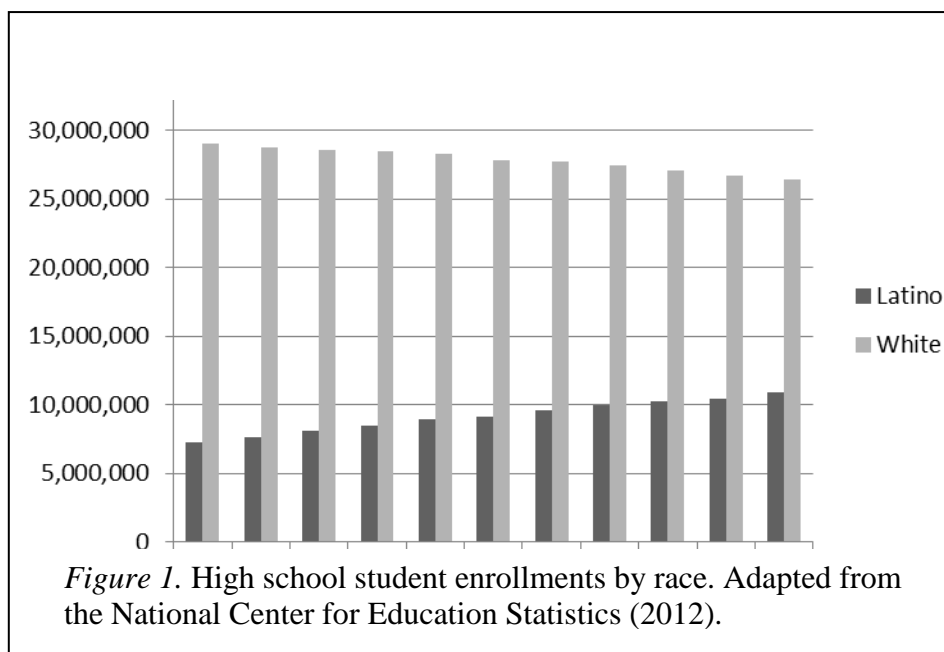
Through continuous personal transformation and growth, I have been able to study some of the problems inherently faced by schools with high poverty and high minority student populations. My research revealed that certain groups of students are not always adequately served by the current educational practices in the majority of American schools. Critical research has become a tool to help me both understand the problems and to search for solutions to transform an educational system that is not always equitable for all.

Through knowledge and active participation in solutions, oppressed individuals in American school systems can achieve their goals and dreams. My presupposition is that this research will increase social consciousness and support the foundation for systemic changes necessary to support all individuals in their pursuit of personal attainment.

The Latino Experience in American Public Schools

The National Center for Educational Statistics (2011) reported that Latinos are the second largest racial/ethnic group in the United States with the proportion of the Latino population increasing 43% from 2000 to 2010. As a result, Latino student enrollment in American public schools is rapidly increasing (National Center for Educational Statistics, 2010). Figure 1 shows the number of White high school students and the number of Latino high school in the United States from 1999 to 2009. Figure 1 confirms that the number of Latino students in American public high schools has increased as the number of White high school students has decreased. Research indicated that the majority of

these Latino students are enrolled in low-income and urban high schools that lack the appropriate academic rigor and college-going culture to adequately prepare them for successful attainment of a postsecondary education (García & Figueroa, 2002; Orfield & Frankenberg, 2008; Venegas & Tierney, 2005).



As the population of Latino students currently increases at a significantly faster rate than any other ethnic group, dropout rates, graduation rates, and postsecondary enrollments across the United States are all notably influenced by this rapidly expanding ethnic group (Gándara & Contreras, 2009). In explaining the importance of equitable education for Latino students, Gándara (2010) claimed:

From their first day of kindergarten to their last day of school, Latinos, on average, perform far below most of their peers. They now constitute the largest minority group in the United States and the fastest growing segment of its school-age population. As such, they are inextricably bound up with the nation's future. (p. 24)

Education beyond a high school diploma is typically a necessity for most highly skilled career paths. President Barack Obama (2010) stated, "Of the 30 fastest growing occupations in America, half require a Bachelor's degree or more. By 2016, four out of

every 10 new jobs will require at least some advanced education or training” (Speech to the Hispanic Chamber of Conference on Education, March 10, 2010). Nevertheless, in Colorado more than half of Latino high school students do not even graduate from high school (MacIver, Belfanz, & Byrnes, 2009). This escalating dropout problem negatively impacts the number of Latino students accessing postsecondary education. The economic opportunities for students, families, schools, communities, and the state are negatively impacted by the underdeveloped talents and abilities of Colorado’s Latino youth (College Board, 2008; Toutkoushian & Shafiq, 2009).

To better understand today’s educational opportunity gap for Latino students, a historical perspective of past practices and federal laws impacting Latino education is reviewed and a current perspective of Latino education is presented. The terms Latino, Hispanic, Chicano, and Mexican American are the four most commonly found names used in the majority of the literature to describe students of Latin American descent. The term Latino was most frequently used in the research literature and will be used throughout this study unless a direct quote uses alternative terminology.

Past Perspective of Latino Student Education

Over the past 160 years, the history of the education of Latino students has documented an inequitable educational system. The Treaty of Guadalupe Hildago (1848) ended the Mexican-American War but did not necessarily afford equal educational opportunities to Latinos. While the number of state-based public schools increased after the signing of the treaty, the marginalized status of the Latino population prohibited a high quality education (Moreno, 2003). Moreno explained that, shortly after the treaty was signed, English was mandated in schools, the use of Spanish was restricted, and

Latino students were typically segregated into separate schools with inequitable conditions which denied them the chance for an equal education.

In a pertinent judicial case, the ruling in *Plessy v. Ferguson* (1896) was used to justify the continued overt separation of races into segregated schools. The case involved Homer Plessy, an African-American shoemaker, who initiated this landmark case when he was incarcerated for violating the Separate Car Act (1890) after riding in the “White” train car of the East Louisiana Railroad. As an American citizen who was seven-eighths White, Plessy argued in *Plessy v. Ferguson* that the Separate Car Act, which required separate but equal train accommodations for Blacks and Whites, violated the Thirteenth and Fourteenth Amendments to the United States Constitution. Ultimately, the Supreme Court of the United States upheld the lower court’s decision, once again finding Plessy guilty.

In reaching the decision, the seven-person majority stated that the Separate Car Act did not conflict with the Thirteenth Amendment because the statute “has no tendency to destroy the legal equality of the two races” (*Plessy v. Ferguson*, 1896, p. 6). Likewise, the Supreme Court decided that the Fourteenth Amendment was not violated because it was not “intended to abolish distinctions based upon color, or to enforce social, as distinguished from political equality, or a commingling of the two races upon terms unsatisfactory to either” (*Plessy v. Ferguson*, 1896, p. 7).

Justice John M. Harlan, the lone dissenter on the Supreme Court, did not agree with the final decision in the case and showed foresight when he wrote:

Our Constitution is color-blind, and neither knows nor tolerates classes among citizens. In respect of civil rights, all citizens are equal before the law. In my opinion, the judgment this day rendered will, in time, prove to be quite as pernicious as the decision made by the tribunal in the Dred Scott case...The

present decision, it may well be apprehended, will not only stimulate aggressions, more or less brutal and irritating, upon the admitted rights of colored citizens, but will encourage the belief that it is possible, by means of state enactments, to defeat the beneficent purposes which the people of the United States had in view when they adopted the recent amendments of the Constitution. (*Plessy v. Ferguson*, 1896, p. 13)

History later confirmed Justice Harlan's assertions. After the *Plessy* decision, "separate but equal facilities" for Blacks and Whites were considered constitutional and that policy was rapidly extended to justify the continued *de jure* separation of minority students, including Latino students, in public schools (Alexander & Alexander, 2009). *De Jure* segregation is defined as school systems using "overt efforts to keep races separate" while *de facto* segregation is separation resulting from ordinary personal choices such as "private housing patterns" (Weiler & Walker, 2009, p. 346; Alexander & Alexander, 2009).

Historically, *de jure* segregation of Latino students into separate schools has grown from various roots. In the early twentieth century, research from several unpublished master's thesis' reported reduced mental capacity of Latino students (Valencia & Black, 2002). As cited in Valencia and Black (2002), M. C. Taylor's 1927 thesis titled *Retardation of Mexican Children in the Albuquerque Schools* and L. L. Lyon's 1933 thesis titled *Investigation of the Program for Mexican Girls to the High Schools of San Fernando Valley* claimed the lack of English language skills, migrant status, unsuitable family cultural values, and inadequate nutrition were contributing factors to the poor academic performance of Latino students. Valencia and Black claimed these unpublished papers legitimized the segregation of Latino students into separate and inequitable schools. These segregated schools typically delivered an inferior education

due, in part, to lowered academic expectations for Latino students (Moreno & Garcia Berumen, 2003).

One example of an attempt to separate Latino students into segregated schools occurred in Lemon Grove, California in 1931. Based on instructions from the school board and purported deficiencies in the academic performance of the Latino students, the principal of Lemon Grove Elementary School turned all of the Latino students away and sent them to a separate two-room school building constructed specifically to segregate the Latino students from the White students (Alvarez, 1986; Madrid, 2008). The case, commonly referred to as the Lemon Grove Incident, was the first successful desegregation case in the United States (Alvarez, 1986; Madrid, 2008).

In the Lemon Grove Incident (1931), the courts determined that the segregation of Latino students in a separate school from White students was inappropriate and the ruling mandated an immediate return of the Latino students to the Lemon Grove school (Alvarez, 1986; Madrid, 2008). Madrid (2008) explained that, since the court decided that placing students in separate schools based on race was not permitted in California, the separation of the first generation American students of Mexican descent was determined to be an illegal segregation.

After the ruling, the displaced children eventually returned to the Lemon Grove school and had the opportunity to receive the same academic instruction as the White students. However, according to Alvarez (1986), the routine *de facto* segregation of Latino children into separate schools continues to be a significant issue in American schools for decades beyond the Lemon Grove incident.

While early research claimed cultural and language issues justified separate schools for Latino children, the establishment of scientific intelligence tests, or IQ tests, during the early 20th century served as further validation for separate Latino schools (Moreno, 2003). Moreno claimed this new IQ data substantiated lower intelligence for Latinos and therefore justified the continued separation of Latino students from White students in American public schools. Segregating students by race into separate schools inevitably resulted in different educational practices and inequitable outcomes for Latino students (Moreno & Garcia Berumen, 2003; Valencia & Black, 2002). These discriminatory practices likely played a vital role in setting the precedent for tracking Latino students into classrooms with inadequate rigor. In researching inequitable past practices, González (2003) explained that the “Mexican children found themselves placed into slow-learner tracks in numbers far out of proportion to their population” (p. 63).

By the mid-1900s, segregation practices in America’s public schools became grounds for prominent court cases. One of those cases, *Mendez v. Westminster* (1946, 1947), was petitioned by five United States Latino citizens filed on behalf of over 5,000 Latino school children. The petitioners, citing the Fourteenth Amendment, questioned the 1896 “separate but equal” doctrine in *Plessey v. Ferguson*. The plaintiffs alleged that American Latino children were excluded from certain schools for White students within the district and were required to attend segregated schools exclusively for Latino students. The court ruled in favor of the plaintiffs, and, in California, the practice of segregating Latino students was ruled unconstitutional. According to González (2003), the *Mendez* case “finds that the Fourteenth Amendment requires a ‘social equality’ rather than ‘equal facilities’” (p. 73). In essence, the case challenged the claims about the

mental inferiority of Latino children and unveiled the social and psychological damage caused by the segregation policies used in public schools. *Mendez v. Westminster* was considered influential in subsequent cases for ending *de jure* segregation for Latino students across America (Delgado Bernal, 2003).

Eight years after *Mendez v. Westminster* (1946, 1947), a landmark decision struck down the “separate but equal” doctrine in the United States. The Supreme Court combined five similar cases that questioned discriminatory educational practices and human rights issues under the heading *Brown v. Board of Education* (1954). The decision in the *Brown* case played a crucial role in shaping policies regarding education and social reform. However, the *Brown* ruling did not result in the immediate elimination of segregated schools since “the court did not specify remedial actions for dismantling dual school systems” (King, Vogel, & Whitaker, 2004, pp. 62-69).

One year after the initial *Brown* decision, *Brown v. Board of Education Topeka* (*Brown II*) (1955) ruled that school districts should put desegregation plans into practice “with all deliberate speed” (p. 300). The purposeful ambiguity of the Supreme Court ruling concerning the timeline of the desegregation plans was designed to allow adequate time for school districts to implement the complex reorganization. Nevertheless, the vagueness of the ruling “effectively legalized delay tactics by individuals who did not want to see schools desegregated” (Weiler & Walker, 2009, p. 346). To further understand the implications of the *Brown II* ruling, King, Vogel, and Whitaker (2004) provided the following clarification:

The Court not only permitted a lax timeline for change, but it also gave states and school districts great latitude to fashion policies that often delayed or avoided action to achieve the goals of admitting students to schools without regard to race and promoting equal educational opportunities. (p. 62)

Brown (1954) and *Brown II* (1955) were monumental decisions for social education reform. Despite these rulings, ensuing Supreme Court rulings “failed to effectively eliminate *de facto* segregation” (Weiler & Walker, 2009, p. 363). Specifically, in a Colorado case, *Keys v. School District No. 1* (1973), the Supreme Court was asked to determine the extent to which Denver public school authorities were responsible for the acknowledged *de facto* segregation in two predominantly minority Denver schools. In its decision, the Supreme Court determined that the petitioners’ lacked sufficient evidence of intentional segregation. The *Keys* decision allowed zoning and housing patterns to continue to negatively impact segregation practices in public schools. Across America, not all students were afforded an equal opportunity to receive the education which would enable them to contribute and participate equitably in society (Gable, 1995).

Latino Students Today

Nearly six decades after *Brown* overturned the 1896 Supreme Court decision of *Plessey v. Ferguson*, public education still experiences segregated school systems that “continue to struggle to provide equal educational opportunities to all children” (Dotson-Blake, Foster, & Gressard, 2009, p. 230). As the population of White students declines in urban schools, the isolation of Latino student populations in schools is increasing (MacIver, Belfanz, & Byrnes, 2009). According to the United States Department of Education (2010), the majority of White students attend public schools where most of the enrollment is White and the majority of Latino students attend public schools where most of the enrollment is Latino. Over 60% of Latino students living in large central and western American cities attend under-funded neighborhood schools with less-qualified

teachers where students lack exposure to peers with college aspirations (Orfield & Frankenberg, 2008).

Today, in a public school system that is increasingly diverse, available research on the effectiveness of public schools appears to reveal little change in the status quo. Casanova (2003) stated that this slowness to change in the public school system may indicate that progress for Latinos is not always “seen as a universally desirable goal” (p. 233). Nieto (1999, 2000) reported that, as the population of Latinos rapidly increases, some communities have experienced a retreat of the White population from public schools. Casanova further explained that many people in White communities today are threatened by the presence and achievements of the Latino population. These perceptions potentially perpetuate the continued segregation.

The president of Educational Trust, Kati Haycock (1999), claimed “The insidious achievement gap that persists between minority and low income students and their white and Asian counterparts results in a disproportional college-educated society that does not reflect the diversity of our nation’s population” (p. 8). Despite current efforts to reform educational outcomes for minority populations, achievement and opportunity gaps persist. Latino students are frequently enrolled in remedial, low-level courses and denied access to equal educational opportunities because of their sub-standard scores on standardized tests (Garcia & Figueroa, 2002). Subsequently, Latinos in today’s public school systems are the least likely group to receive financial aid, attend college, obtain their degrees, and pursue professional degrees (McDonough, 2005; Tierney, Colyar, & Corwin, 2005).

Consequences of the Latino Achievement Gap

In examining the last 30 years of Latino education, Gándara (2010) stated “The failure over more than three decades to make any progress in moving more Latino students successfully through college suggests that what we have been doing to close the achievement gap is not working” (p. 24). Latino students continue to record high dropout rates, experience low academic achievement, and are underrepresented in AP and college-level courses (Watt, Powell, & Mendiola, 2004). Critical to appreciating the profound consequences of the Latino achievement gap is a consideration of the reasons for the underrepresentation of Latinos in AP courses and an understanding of the lost opportunities for Latino students due to an inferior high school academic experience.

The Lack of Latino Students in Advanced Placement Courses

Across the United States, not all high school students experience equal access to Advanced Placement courses (Flowers, 2008; Gonzales, 2009; Soloranzo & Ornelas, 2004). The College Completion Agenda 2011 Progress Report indicated that 58% of all 2010 AP exams in the United States were taken by White students as compared to 16% of all exams taken by Latino students (College Board, 2011). In particular, the state of Colorado continues to experience an inequitable underrepresentation of Latinos in AP courses at its public high schools (College Board, 2010). Figure 2 shows the percentage of White and Latino AP participation in Colorado. The graph in Figure 2 reveals that, in Colorado, the percentage of the Latino student population is disproportionate to the percentage of Latino student AP enrollments while the data are reversed for White students.

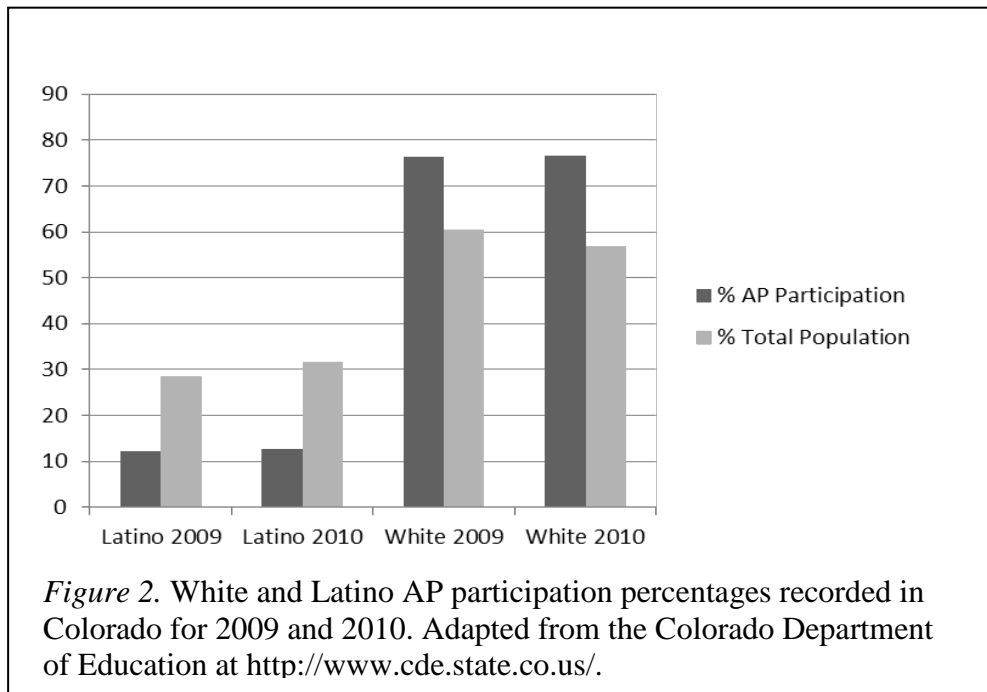


Figure 2 also indicates that, while the percentages of Latino and White AP participation showed little change between 2009 and 2010 in Colorado, the total proportion of Latino students increased while the total proportion of White students decreased. This disproportionate number of Latino students enrolling in AP courses in Colorado represents a gap in the “percent of equity and excellence achieved” that potentially contributes to inequitable educational opportunities for Colorado’s Latino students (College Board 2011, p. 17). As defined by the College Board, an equity gap occurs when traditionally underrepresented student populations report a smaller percentage of successful AP exam test takers than the percentage of their graduating class. For the 2010 graduating class, the College Board ranked Colorado 47th out of 50 states and the District of Columbia in the percent of equity and excellence achieved for Latino students.

The Opportunity Gap

In a country where the fastest growing segment of the population is Latino, America's public schools are challenged in implementing equitable systems which institute rigorous academic standards to provide all students with the opportunity for a postsecondary experience. Michael, Edwards, Menson, and Rawles (2011) stated:

Addressing socioeconomic, racial and ethnic inequalities in higher education requires persistent and meaningful efforts by states to provide postsecondary access and opportunity to the steadily growing numbers of undereducated and underrepresented minorities. Beyond the moral imperative to achieve equity among populations of different racial and ethnic backgrounds, there are economic reasons for doing so. (p. 241)

In addition to considerably lower lifetime earnings, the underdeveloped intellectual growth for students receiving an inadequate education perpetuates inequalities and enhances lost opportunities (Michael, Edwards, Menson, & Rawles, 2011). Social costs associated with an inadequate education and lost opportunities are substantial (Flowers, 2008). Determining ways to increase college attainment for Latinos is a challenge in America's schools. Some research findings indicated that AP participation could increase postsecondary enrollment and impact future income.

National Center for Educational Statistics (2010) claimed that "students who complete Advanced Placement courses in high school may be better prepared for college than their peers and could potentially complete their college degrees in a shorter time period" (p. 76). According to the College Board (2011), 45% of students who take one or more AP courses finished their bachelor's degree in four years or less. Multiple research findings revealed that participation in high school Advanced Placement programs has been shown to be associated with higher rates of postsecondary attainment and financial success as adults (Bleske-Recheck, Lubinski, & Benndow, 2002; Robinson, 2003).

Flowers' (2008) quantitative research on the effects of Advanced Placement program participation and labor market outcomes revealed that students' educational and labor outcomes were "substantially impacted by AP program participation" (p. 128). However, the underrepresentation of Latino students in AP courses limits their access to postsecondary education and inhibits their future employment and earning opportunities (Delgado Bernal, 2003).

Advanced Placement Access in Educational Systems

To better understand the multiple ways students can access Advanced Placement courses in schools, an explanation of the typical AP enrollment policies are discussed. Public schools offering AP courses typically follow one of two policies: Advanced Placement for those that meet qualifying criteria, termed ability tracking, or Advanced Placement pathways made available for every student, termed rigor for all. The following provides a description of these policies along with issues associated with each.

Ability Tracking

Ability tracking is typically defined as a school policy that divides students into separate courses which could potentially result in disparate future opportunities based on student ability (Chambers, 2009; DeSena & Ansalone, 2009). Lucas and Berends (2002) stated that this policy-based *de facto* tracking system occurs when schools purposefully use defined registration processes which assign students into differentiated curriculum based on previously established criteria. Even without structured school policies, differentiated student schedules in some public high schools often result in ability tracking practices. For example, high school students enrolled in honors-level mathematics and English courses typically have daily schedules which are different from

students not enrolled in those advanced courses (Lleras, 2008). Lucas and Berends explained that if registration policies are not imposed and student schedules are still associated with course enrollment trends, *de jure* tracking exists. Registration policies connected to *de jure* tracking typically include prerequisites for AP courses, such as successful completion of honors courses, scores on state or national standardized exams, and teacher recommendations (DeSena & Anaslone, 2009; González, 2007; Lleras, 2008; Martinez, 2001).

Proponents of using ability tracking believe this system results in numerous benefits for all students. For example, advocates of ability tracking claim this school structure increases the academic achievement and self-concept of all students because they are able to learn at their own pace and are grouped with like-minded peers who may be academically comparable (Lucas & Berends, 2002). In addition, DeSena and Anaslone (2009) reported that ability grouping advocates claim this tracking system supports higher teacher expectations, promotes positive student self-concept, encourages positive attitudes toward school, differentiates course content based upon student needs, and results in higher academic achievement for those in higher-ability groups.

However, not all studies favor ability tracking. Research indicated early enrollment into higher-level ability tracked courses may influence future course-taking patterns and offer advantages over students in less rigorous courses (Lleras, 2008). For instance, in some school systems, the completion of higher-level ability track courses is a prerequisite for Advanced Placement course enrollment. Requiring prerequisite courses potentially blocks students in lower tracks from accessing AP courses. Although individual students may possibly switch to a higher ability track and be eligible for AP

enrollment, school systems using ability tracking typically separate students into distinct pathways as early as elementary school and switching to a higher track is rare (DeSena & Asalone, 2009). Early tracking into perceived ability levels could potentially result in inequitable educational opportunities for students placed in lower tracks. In particular, Latino students experience a lack of mobility between ability tracks and frequently struggle for academic equity in ability tracking systems (Lleras, 2008; Lucas & Berends, 2002; Gándara, 2010; Oakes et al., 1992; Spielhagan, 2006).

Opponents to the practice of placing students in advanced tracks based on sorting and selecting claim that these policies simply maintain the status quo. Spielhagan (2006) claimed the tendency toward ability tracking has done little to close the achievement gap between White and Latino students. Ability tracking limits opportunities by systematically enrolling Latino students into lower-track courses. Remedial courses often lack the engaging, differentiated classroom content typically associated with high-level courses (Hertzog, 2005). Tracking practices potentially deprive Latino students of advanced learning experiences and contribute to the low proportion of Latino student AP participation (Gándara, 2010; Lleras, 2008; Oakes et al., 1992).

Regardless of the type of tracking that exists, the solitary act of enrolling students into separate tracks conveys a message that children of color are inferior (Lawrence, 1993). Ability tracking policies, such as mandating the completion of prerequisite honors courses, standardized tests scores, or teacher recommendations used as indicators for admittance into Advanced Placement courses, typically obstructs beneficial educational opportunities for Latino students (DeSena & Anaslone, 2009; González, 2007; Lleras, 2008; Martinez, 2001). School systems using ability tracking often provide richer

learning opportunities for those in higher tracks while students in lower tracks experience a disadvantage over other students with better opportunities to learn (DeSena & Ansalone, 2009). A potential for bias exists when school systems make essential academic choices for students. Ravich (2010) stated that school systems contriving critical choices for students by using standardized measurements to ability track students tend to create imbalanced pathways. Is there another viable option for school systems?

Rigor for All

One option may be to provide equitable access to rigorous AP curriculum for all students. A rigor for all system may collectively act as a compass to provide some direction for school districts to help steer student achievement toward academic success for all learners. “As expectations, opportunities, resources, and access become equitable across all racial groups, the gaps close because all students are supported in the differentiated ways necessary to achieve success” (Singleton & Linton, 2006, p. 33). Spielhagan (2006) explained that embracing a movement toward exposure to enriched curriculum for all learners has the potential to generate a more rigorous, inquiry-based, collaborative learning environment that is beneficial for all students.

To specifically increase Latino student achievement, systemic change may be necessary. Curriculum and instruction which consistently challenges Latino students to use higher cognitive levels of critical thinking and problem solving could help close the achievement gap (Hertzog, 2005). Exposure to advanced curriculum for all students could possibly lead to increased student motivation and improved adaptation skills (Greir, 2002). Freedman (2000) provided the following vision of America’s education in the future:

Envision the day when a college-preparatory education is no longer conducted within a Great Wall that keeps intruders out, but rather an inclusive classroom that teaches students from diverse cultures the abiding disciplines of inquiry and determination so that they, too, may cross the Great Divide. (p. 409)

Embracing a belief that all students can be adequately prepared for the intellectual engagement required in AP level courses has the potential to alter the status quo.

Potential Barriers in Transitioning Latino Students to Advanced Placement Courses

Innovative educational leaders in school districts across the nation recognize the importance of increasing access to equitable, high-level educational opportunities for all students. However, schools have been challenged to equitably educate all Latinos in America (González, 2007). Systemic issues in school systems, such as ability tracking, low teacher expectations, and improper identification of gifted minority students all create potential barriers in transitioning Latino students to AP courses.

The use of ability tracking in schools could possibly act as an additional systemic barrier to Latino student enrollments in Advanced Placement courses. School systems using ability tracking foster low academic expectations, perpetuate low achievement, and limit opportunities that create barriers which negatively impact Latino student academic performance (Gándara, 2010). Consequently, Latino students enrolled in lower track courses with altered course content may lack the appropriate level of academic experience necessary to be successful in AP courses.

In addition, ability tracking has been shown to negatively influence classroom instructional practices and teacher expectations. For example, ability tracking lowers the level of teacher expectations and encourages teachers to alter course content based on perceived lower learning abilities (González, 2007). Marzano (2008) emphasized that,

although teachers should be given some autonomy in the instructional practices used in their classrooms to produce learning, “there should be no variation in expectations about student learning from teacher to teacher” (p. 29). To appropriately provide AP opportunities for all students, educational systems must recognize the significant barrier that teacher expectations play in the educational experiences of Latino students.

Withholding AP curriculum from students based on teacher perceptions that they lack the skills to succeed in enriched programming contributes to their achievement gap and limits their opportunity for growth (Spielhagan, 2006).

Compounding the issue of the achievement gap and limited growth opportunities for Latino students is the inequity in school systems concerning identification of gifted minority students. Despite training, even experienced teachers of minority and economically disadvantaged students fail to appropriately identify their high potential (Spiers-Neumeister et al., 2007). A lack of teacher understanding regarding at-risk perceptions of cultural difference often impedes minority student identification of high-potential minority students (Hertzog, 2005; Kettler et al., 2006; and Lidz & Macrine, 2001).

Statement of the Problem

Since the signing of the Treaty of Guadalupe Hildago (1848), numerous historical court cases impacted the educational opportunities for Latino students. However, Latino student access to Advanced Placement coursework continues to be blocked by inequitable tracking practices and the existence of biased teacher expectations and recommendations. The College Board (2010) reported that approximately 12% of Latino high school students participate in Advanced Placement programs, far below the 75% of

White AP participants. In researching the inequities in AP Latino student participation, Moore and Slate (2008) stated “Unequal access here simply adds to the inequities already present in today’s schools and society” (p. 64).

School districts across America face challenges in finding effective ways to implement and sustain systemic changes within schools to support Latino students interested in participating in Advanced Placement courses. This limited access to AP courses potentially creates an opportunity gap for the Latino population. School structures that specifically provide Latino students equitable access to AP coursework at the high school level is needed in most districts across the nation.

Few studies exist to explore what school systems can do to increase the access to and equity in high school Advanced Placement programs for Latino students. Since 1999, the total number of Latino students participating in AP has tripled; however, the percent of the total proportion of Latino student participation in AP courses has remained nearly the same (College Board, 2010). More studies are needed on the connection between school systems and low Latino student Advanced Placement participation. The intent of this study is to identify systemic barriers to high school Advanced Placement programs experienced by Latino students.

Purpose of the Study

The purpose of this study is to determine a deeper understanding of the issues that contribute to the underrepresentation of Latino students in Advanced Placement programs. Two central questions form the foundation of the study: (1) What are Latino students’ perceptions of their access to high school Advanced Placement coursework? (2) What are Latino students’ perceptions of the equity in high school Advanced Placement

coursework? Using a critical theory approach, this study could potentially transform social and systemic academic barriers encountered by Latino high school students.

The hope is that this study will provide insights into the underrepresentation of Latino students in Advanced Placement programs. To explore the Latino high school students' experience in their pursuit of AP programs, the study addressed two research questions:

- Q1 What are the Latino students' perceptions of the systemic structures and educational practices within a high school that support access to and equity in Advanced Placement programs for Latino students?
- Q2 What types of Advanced Placement program experiences do Latino students have in high school as compared to White students?

Significance of the Study

Developing school systems that provide the necessary academic rigor for all students to graduate from high school prepared for postsecondary education is a significant topic for today's educational leaders to understand and an important goal to explore (Ramers, 2010). Increased poverty rates due to an inadequate education can potentially be a costly burden on communities. Because Latino students are the fastest growing sector of school age children in Colorado, the quality of their education has state-wide implications for communities, schools, families, and the students themselves.

Ensuring that high school Latino students are enrolled in high quality, rigorous coursework, such as Advanced Placement courses, is an important goal for educational leaders. Enrollment in Advanced Placement programs impacts college attainment and potential future income (Kyburg et al., 2007; Santoli, 2002; Solorzano & Ornelas, 2004). Since AP program participation has been shown to play a significant role in a college-preparatory education and college attainment, educational leaders must recognize and

comprehend reasons why Latino students are underrepresented in Advanced Placement programs.

This study provides educational leaders with a deeper understanding of Latino students' access to and equity in rigorous Advanced Placement programs. Providing leaders with an in-depth understanding of the barriers faced by Latino students in today's American public schools could potentially contribute to the eradication of the persistent disparities in Latino student AP participation and help provide all students with the appropriate tools to cross the great divide.

Definition of Terms

The following terms pertinent to this study are used in context and defined in the following manner:

Comprehensive High School. A high school that offers a varied menu of academic content and elective courses and supports numerous extra-curricular activities such as clubs and sports.

Equity. The proportion of Latino students who are successful high school Advanced Placement exam test takers is equal to the percentage of Latinos in the high school's graduating class (College Board, 2011).

SAT. A widely used college admissions exam used to assess college readiness. First introduced in 1926, the SAT is currently developed, published, and scored by the College Board. Initially named the Scholastic Aptitude Test and then the Scholastic Assessment Test, presently the SAT is an empty acronym.

Conclusion

Although today's schools across the United States often display mission statements espousing the education of all students at a high level, current national statistics do not confirm that all ethnic groups receive the benefits of that frequently declared goal. When data from all ethnic groups are evaluated, Latino students regularly record the lowest performance on standardized tests and the highest high school dropout rate (National Center for Educational Statistics, 2010; Padròn, Waxman, & Rivera, 2002). These statistics raise concern over the level of academic preparedness for today's Latino students to successfully attend or complete postsecondary degrees.

Past and present issues of segregation and disenfranchisement in America's public schools continue to propagate beliefs of inadequacy among Latino students. Students enrolled in substandard, segregated classes where academic expectations are not rigorous convey a message of inadequacy and perpetuates the achievement gap (Delgado Bernal, 2003; Orfield & Frankenberg, 2008). This lack of academic achievement has been shown to foster opportunity gaps in college attainment, potential future job options, and life-long income.

Chapter two provides a review of the literature related to the following three areas: (1) the factors related to the Latino educational achievement gap, (2) the importance of Advanced Placement program participation, and (3) the lack of Latino participation in the Advanced Placement program. The possible reasons for the lack of Latinos enrolled in AP courses and the opportunity impact of successful completion of AP coursework will be explored further to form the foundation for this study.

CHAPTER II

A REVIEW OF THE LITERATURE

Throughout the history of public education in the United States, many ethnic groups have overcome challenges in adapting to American society. However, generations of Latino students are underperforming academically while the children of other immigrants typically improve their educational levels with each generation (Gándara & Contreras, 2009). Although previous landmark legislation provided some progress toward increasing equitable educational opportunities for all students, questionable practices within American public schools continue to contribute to the disenfranchised status of the Latino population.

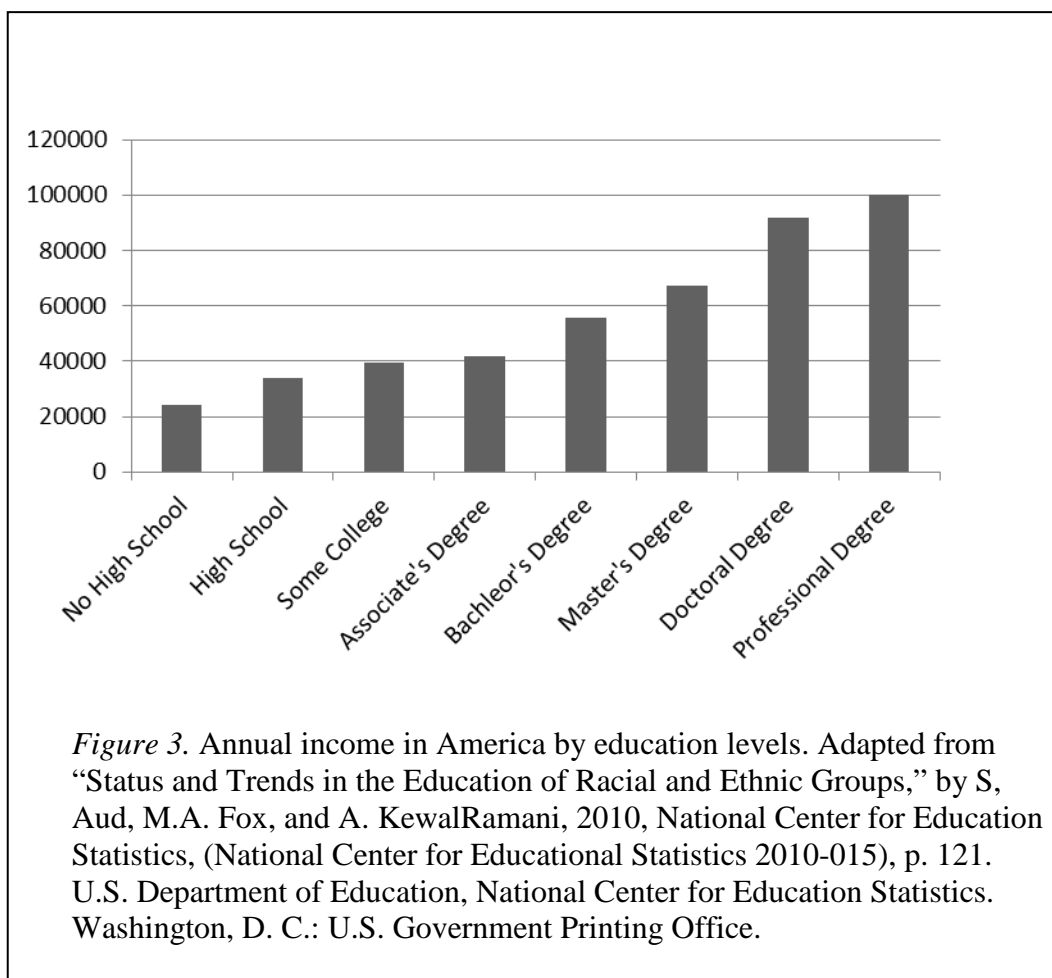
The emergence of Latinos as the fastest growing ethnic group in America raises the level of concern over the differences in Latino student academic performance (Flowers, 2008; Gándara & Contreras, 2009; Gonzales, 2009; Soloranzo & Ornelas, 2004). Latino students continue to perform significantly lower than all other ethnic groups on achievement tests, typically record high dropout rates, are underrepresented in Advanced Placement (AP) courses, and experience low academic attainment (Betts, Rueben, & Danenberg, 2000; Gándara & Contreras, 2009; Riegle-Crumb, 2010; Soloranzo & Ornelas, 2002, 2004; Watt, Powell, & Mendiola, 2004). Public schools across the United States face significant challenges in educating all students, and in

particular Latino students, to the level needed for well-paid jobs that are increasingly dependent on higher levels of education.

Participation in Advanced Placement courses has been shown to provide the academic rigor necessary for college attainment and subsequently higher paying jobs. Yet, Latinos are typically enrolled in lower academic pathways and are essentially blocked from AP participation (Soloranzo & Ornelas, 2004). The review of the literature will examine factors acting as potential barriers for Latino student enrollment in AP courses.

The Importance of College Readiness

The College Board (2010) reported that workers with a bachelor's degree typically earned nearly twice that of those earning only a high school diploma. Figure 3 displays typical annual earnings from education levels ranging from no high school diploma through various levels of postsecondary education. The data in Figure 3 indicate that completion of a postsecondary education provides individuals with the skills necessary to increase their chances of earning higher annual incomes and emphasizes the economic opportunities afforded by college attainment. The economic and social realities of current American society reveal that a high school diploma alone does not earn the income associated with personal attainment and success (Perez, 2009).



As the fastest growing minority in America, Latinos continue to make up an increasing proportion of the public school population. Yet, Gándara and Contreras (2009) reported that, for the past 20 years, the percentage of Latinos earning college degrees has not increased while the percentage earning college degrees for all other demographic groups has increased. Figure 4 helps to better understand this claim.

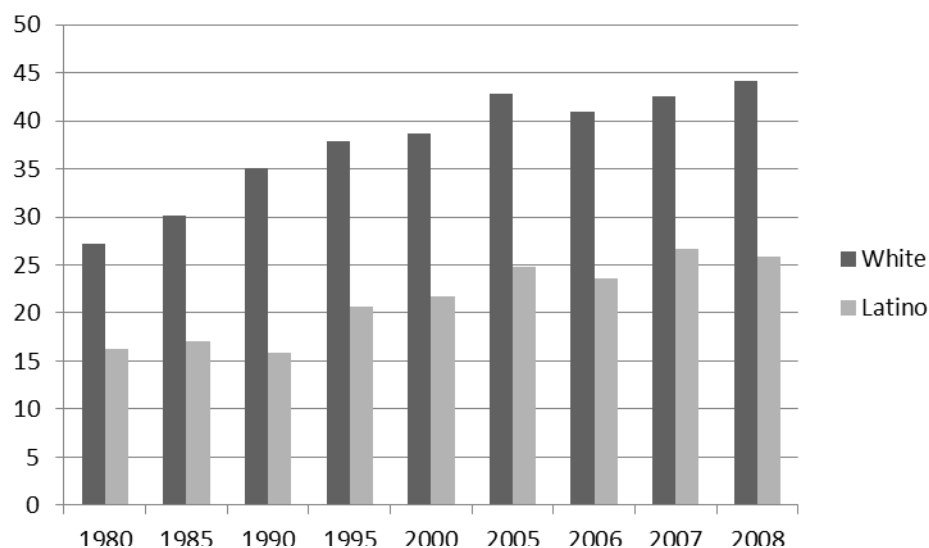


Figure 4. Percentage of American college and university enrollments for White and Latino 18 to 24 year olds. Adapted from “Status and Trends in the Education of Racial and Ethnic Groups,” by S. Aud, M.A. Fox, and A. KewalRamani, 2010, National Center for Education Statistics, (National Center for Educational Statistics 2010-015), p. 121. U.S. Department of Education, National Center for Education Statistics. Washington, D. C.: U.S. Government Printing Office.

Figure 4 displays a graph of the percentage of White and Latino student populations enrolling in an American college or university. Note that the gap between White and Latino college and university enrollments has increased from 11% in 1980 to 18% in 2008. The lack of a postsecondary education for a high percentage of Latinos represents both an opportunity gap for future employment options and lost lifetime earning potential (Aud, Fox, & KewalRamani, 2010).

Padròn, Waxman, and Rivera (2002) emphasized the important connection between a student’s high school curriculum and the successful completion of a college degree. While class rank and standardized test scores are influential college success

indicators, successful completion of rigorous high school courses significantly impact the realization of a college degree for Latino students (Gándara, 2003). Enrollment in College Board AP courses expose students to a challenging curriculum and the critical thinking skills necessary to prepare for college success (Hargrove, Godin, & Dodd, 2008).

The College Board and College Readiness

The College Board Advanced Placement program began in 1900 as the College Entrance Examination Board. The College Board is a non-profit membership association whose single goal is to ensure that all students have the opportunity to prepare for, enroll in, and graduate from college (College Board, 2012). This multi-disciplinary college readiness program offers 34 AP high school courses in mathematics, science, social studies, language arts, computer programming, world languages, music, and art. Successful completion of AP courses has been shown to help students have higher grade point averages, qualify for scholarships, prepare students for college readiness, and successfully complete college within four years (Kyburg et al., 2007; Riegle-Crumb, 2010; Santoli, 2002; Solorzano & Ornelas, 2004).

With rigorous curriculum and final exams developed and approved by college faculty, over 3,600 colleges and universities worldwide accept successful AP exam scores as college credit or course advancement (College Board, 2012). Advanced Placement exams are given annually to AP students who have registered to take the exams. Exam scores range from one to five, five being the highest score. Students earning a three, four, or five on the AP exams can earn college credits in most four-year

colleges in the United States and in colleges located in 60 countries world-wide (College Board, 2012).

However, enrollment in schools offering Advanced Placement programs does not necessarily assure that Latino students participate in AP classes and experience college attainment at the same level as their peers (Moore & Slate, 2008; Soloranzo & Ornelas, 2002; VanSciver, 2006). In 2011, an estimated 70% of Latino students who had the potential to successfully take an AP course did not enroll in the program (College Board, 2012). Reasons for the disproportionate low Latino student enrollment are varied. Gándara and Contreras (2009) claimed the low AP enrollments of Latino students cannot be explained by one factor or even a combination of factors. Inequitable conditions produce factors both outside the school system and within the school system that deter Latino student enrollment in advanced coursework.

Factors in Closing the Achievement Gap for Latino Students

Klopfenstein (2004) determined that low socioeconomic status significantly contributed to lower enrollment in Advanced Placement courses for students of color. While economic factors are significant probable determinants in student achievement, those factors do not entirely predict a student's potential to learn (Lidz & Macrine, 2001; Rothstein, 2004). For example, as family income increases, the average SAT score also increases for all ethnic groups throughout all levels of income (Singleton & Linton, 2006). This indicates that, regardless of socioeconomic status, Latino students typically experience lower academic success than White students. Therefore, in addition to poverty, other factors impacting the achievement gap for Latino students should be reviewed.

Considerable research has been given to the educational disparities of Latino students. However, finding the solution is complex. “It would be simplistic to suggest that a single cause or even a combination of factors could entirely explain the low level of achievement of many Latino students” (Gándara & Contreras, 2009, p. 28). Frequently cited important factors impacting Latino student achievement include poverty, racism, immigration, culture, language, and gender (Camarota, 2006; Delgado Bernal, 2003; Dotson-Blake, Foster, & Gressard, 2009; Gándara and Contreras, 2009; Mickelson, 2003). Consequently, current research on those six factors connected with Latino student achievement will be examined.

Poverty

Poverty levels are measures by guidelines determined by the United States Department of Agriculture to help those families most in need of financial support. In schools, qualifying families may receive free or reduced breakfasts and lunch. Other school services, such as waived school fees, may also be available to high poverty families.

Although poverty is primarily defined as a lack of money, families living in poverty tend to perpetuate a cycle of low academic attainment and underpaid jobs (Gándara & Contreras, 2009; Rothstein, 2004). Historically, in the United States, Latino families are disproportionately represented in underpaid, lower wage jobs that require little higher education (Delgado-Gaitan, 2001; Gándara & Contreras, 2009); thus, Latino children are more likely than other ethnic groups to come from a family of poverty.

As early as kindergarten, Latino student low academic performance can be attributed to multiple factors correlated with high poverty (Gándara & Contreras, 2009).

Berliner (2009) cited insufficient prenatal care, inadequate medical, dental, and vision exams, inappropriate diet, environmental conditions, and family stress as examples of factors frequently found among high-poverty children. These factors negatively impact students' well-being and academic achievement. Students who come to school hungry, in need of medical attention, or with uncorrected vision are faced with adverse conditions caused by low socioeconomic factors that contribute to their inability to learn.

While research concluded that low economic status has been found to be a barrier to academic success, little has been done to negate the influential barriers produced by poverty. While reports of high-poverty high-functioning schools exist, the academic success experienced by a few high poverty schools is not typically duplicated or sustained in schools with similar demographics (Lidz & Macrine, 2001; Reeves, 2007; Rothstein, 2004). Poverty continues to create a complex set of factors that challenge today's schools in their efforts to close the achievement gap.

Racism

The National Latino Survey (2007) showed that 54% of Latinos believe that racism and discrimination are major problems that prevent Latinos from succeeding in America. Furthermore, the same survey reported that 64% of the Latino participants stated that negative perceptions against their ethnic group are a problem in public schools (National Latino Survey, 2007). Casanova (2003) described the following scenario in American schools:

Today in a United States that is increasingly diverse but where, simultaneously, there are few common areas where everyone meets as an equal, the school is often the place where various groups are forced to meet. And from Dewey's progressive education to desegregation to bilingual education, schools have been the stage for the cultural battles that have engaged the country through the centuries. (p. 228)

Prejudices associated with biased, uninformed judgments regarding Latino students and parents negatively impact the academic performance of Latino students (Lidz & Macrine, 2001; Rothstein, 2004; Walker & Pearsall, 2012). Singleton & Linton (2006) determined that despite tremendous social reform efforts by public school leaders, race and racism contribute to the Latino students' struggle to access AP programs.

Immigration

The 2007 National Survey of Latinos indicated that more than half of all Latino adults in the United States are concerned that they, a family member, or a close friend will be deported and nearly two-thirds say the failure of Congress to enact an immigration reform bill has made life difficult for all Latinos (National Survey of Latinos, 2007). For the children of some undocumented families, the uncertainty of their future could potentially create a loss of hope concerning their educational aspirations and negatively influence their motivation to enroll in AP courses.

The topic of immigration is complex, contradictory, and controversial. Current political malaise concerning illegal immigration is reported in headline news across the nation. In political debates and media reports, immigration policy is inextricably intertwined with the documentation status of Latino families (Gándara & Contreras, 2009). In addition, the prevalent recessive economic conditions across the country escalate anti-immigration sentiments (Delgado-Gaitan, 2001). Delgado-Gaitan (2001) explained that when the economy is in recession, immigrants are commonly the targets for blame, and, in some instances, legal Latino citizens have been the target of negative comments and actions based on the color of their skin.

Immigration issues in education are not new. In 1975, the Texas legislature passed a law which denied public school education and withheld school funding for undocumented children. In *Plyler v. Doe* (1982), the Supreme Court concluded that the 1975 Texas law violated Fourteenth Amendment rights since undocumented school-age children were living in this country through no fault of their own and were entitled the same public education afforded to legal citizens. The decision in *Plyler v. Doe* stated that public school education for all children is fundamental in maintaining a democratic society and provides conditions for an individual to become an independent citizen.

Although school districts are legally obligated to provide academic opportunities for all students regardless of immigration status, the lack of documentation status within families can negatively impact student achievement (Delgado Bernal, 2003; Dotson-Blake, Foster, Gressard, 2009; Espinoza-Herold, 2003). Although many families with documentation status also live in high poverty, undocumented parents may not apply for services, such as school breakfast and lunch programs, because they may either be unaware of these services or be fearful of jeopardizing their legal status (Gándara & Contreras, 2009). Without qualifying school services, students are also potentially responsible for course fees, additional classroom supplies, and exam fees typically required for entry into AP courses. These additional fees assessed to undocumented students could potentially act as barrier to AP enrollment.

Equally problematic is the loss of hope experienced by undocumented high school students who consider taking Advanced Placement courses unnecessary because they lack access to postsecondary opportunities (Walker & Pearsall, 2012). Undocumented students are not eligible for federal student loans which provide access to postsecondary

education for many high poverty students with legal status. In addition, many colleges and universities charge significantly higher tuition rates to undocumented students. This lack of access to financial support, plus higher tuition rates, limits postsecondary options for undocumented students.

Culture

According to Garcia and Figueroa (2002), culture typically includes the shared behaviors and ideas concerning the accomplishment, character, and capacity of a group that are passed down from generation to generation. Nieto (1999) explained that culture is variable and can change depending upon environmental influences, connections to prominent surroundings, and an understanding of accepted social mores. This compliance to a prevailing culture is defined as cultural capital which influences social behaviors and personal identities (Bourdieu, 1985; Nieto, 1999).

Gándara (2003) stated that a strong ethnic cultural community is important for the successful adaptation of low-income Latino students. Yet, in a nation that was built on embracing diversity, not all cultures have the same perceived social worth. Vollmer (2010) claimed that people tend to associate solely with in their own culture and discourage their children from associating with disparate groups that are perceived to have lesser social value. This may contribute to the underrepresentation of Latinos in Advanced Placement programs where the majority of enrollments are White students. Nieto (1999) stated that Latino students enter school systems eager to learn but “end up as the waste products of an educational system that does not understand the gifts they bring to their education” (pp. 62-63).

Valencia and Black (2002) reviewed multiple aspects of the influence of culture, particularly from low-income households, on the academic achievement of children. Their research predominately examined the myths and realities regarding parent expectations. Findings from Valencia and Black concluded that, whether within the home or the school, Latino parents are highly “interested and involved in their children’s education” (p. 96).

Language

Another contributory factor in the achievement gap is language. Students who are not proficient in English typically experience lower academic achievement when compared to their peers who are fluent in English (Espinoza-Herold, 2003; Gándara & Contreras, 2009). Latinos with limited English proficiency are typically segregated into remedial courses with limited opportunities to interact with native English speakers (Delgado, 2003). Delgado (2003) further explained that the majority of English learners in America are enrolled in schools where more than one-third of the students are not English proficient. Delgado’s research suggested that schools with this type of enrollment often experience low achievement test scores, high dropout rates, and increased marginalized status for Latino students.

A further review of research provided additional understanding surrounding learning and information gaps due to language barriers. For example, limited English skills are linked to assertions from Latino families that non-English speaking students and parents are not supported by the school system and are uninformed when it comes to vital information that would enhance the educational experience of Latino students (Camarota, 2006; Wiese & Garcia, 1998). Gándara and Contreras (2009) confirmed

that Latino families with limited English proficiency often lack the skills and cultural capital necessary to access resources needed for their children's academic success.

Previous research indicated that increasing cultural capital is vital for accessing school resources; however, English learners often have difficulty understanding the system due to language barriers. Comprehending systems such as basic school policies regarding grading, dress codes, schedules, behavior, and attendance is challenging for both students and parents who do not speak English (Chavkin & Gonzales, 1995; Gibson, 2002). Latino students who have little understanding about rudimentary school policies may also be challenged in understanding the ways in which they might access AP courses.

Gender

Latino males frequently experience lower academic achievement and higher dropout rates when compared to their female and Anglo peers (Carranza, You, Chhuon, & Hudley, 2009; Gándara & Contreras, 2009). According to the Colorado Department of Education, the 2011 high school graduation rate for Latino males is 55.6% while the graduation rates for Latinas, White males, and White females are 64.7%, 70.3%, and 77.6% respectively (Colorado Department of Education, 2011). Unfortunately the Latino males who do graduate from high school are frequently underprepared for the higher thinking skills and academic prerequisites required for enrollment in postsecondary education (Riegle-Crumb, 2010). Riegle-Crumb's (2010) research also indicated that Latinas are 70% more likely than their male counterparts to attend college.

Latino males often experience lower academic aspirations, motivation, and achievement (López, Ehly, & Garcia-Vasquez, 2002; Carranza et al., 2009). In

researching possible reasons for the disproportionate underachievement of Latino males, Carranza, You, Chhuon, and Hudley (2009) determined that academic performance and aspirations were influenced by parents educational expectations, students' acculturation, and students' self-esteem. Rowley and Moore (2002) reported that gender is powerfully influential in student identity. In particular, Gándara and Contreras (2009) stated that Latino males often have issues with maintaining a student identity when there is family pressure to earn an income and embrace a worker identity. Latino males are frequently obligated to financially support the family while their female peers are less driven to financially contribute to the family and thus free to attend college (Gándara & Contreras, 2009).

Research findings have linked the educational disparities recorded by Latino males to social capital influences. As early as elementary school, students of color may experience social capital influences from school systems that negatively reinforce their academic potential by placing students in remedial groups (Chambers, 2009). Riegle-Crumb (2010) reported that significant predictors of Latino male academic success relating to social capital include the number of academic conversations with high school counselors. However, some Latino males have experienced apathy when speaking with counselors (Camarota, 2006). Social support for Latino males is often essential when considering their educational outcomes (Carranza et al., 2009).

Barriers for Latino Students in Advanced Placement Courses

While research confirms that poverty, racism, immigration, culture, language, and gender factors impact Latino student achievement in public schools, educational factors within school systems also require investigation. School systems can play a critical role

in helping Latino students determine their advanced educational options (Grier, 2002; Klopfenstein, 2004; Kyburg et al., 2007). Yet, in the 8th Annual Report to the Nation (2012), the AP College Board (2012) claimed that school systems have been challenged to transform the educational opportunities and experiences for minorities and underrepresented populations. The report explained that school systems with high proportions of low income and minority students need improved identification policies, equitable enrollment practices, social emotional counseling, and academic support systems in order to create equitable access to AP programs (College Board, 2012). In addition to these identified schools systems, lowered teacher academic expectations for high poverty students of color also resulted in reduced academic achievement (Cammarota, 2006; Mickelson, 2003; Noguera & Wing, 2006).

To provide a deeper understanding of systemic issues related to Latino Advanced Placement enrollments, additional literature review concerning Latino AP enrollments include will two main topics: (1) how systems provide access to advanced learning opportunities and (2) how teacher expectations impact student success (Casanova, 2003; Gándara & Contreras, 2009; Grier, 2002; Klopfenstein, 2004; Kyburg et al., 2007; Venegas & Tierney, 2005; Watanabe, 2008; Watt, Powell, & Mendiola, 2004).

Access to Advanced Learning Opportunities

In a study of African American student access to Advanced Placement courses, Taliaferro and DeCuir-Gunby (2007) stated that parents were not aware of the opportunities afforded by the AP program and therefore did not advocate for their children's enrollment in AP courses. Latino parents typically trust that schools are scheduling students into appropriate classes that are best for their children (Riegle-

Crumb, 2010). Therefore, Latino parents and their children are often unaware of differentiated course options and rely on school systems to identify those students eligible for advanced courses. Consequently, the marginalized status of Latino students is compounded by a lack of identification policies that promote equal access to Advanced Placement programs.

Understanding how to access Advanced Placement courses may be dependent upon the social-cultural makeup of the school's AP program (Betts, Rueben, & Danenberg, 2000). While researching systemic barriers to AP classes for Latino students, Walker and Pearsall (2012) concluded that a school system's multicultural insensitivity can influence the underrepresentation of Latino student AP enrollments. When school systems are structured in ways that conflict with Latino cultural norms, the misunderstanding that occurs creates an expectation gap between the system's perceptions about what students can achieve and what students hope to achieve. In this way, the characteristic school culture in general is potentially at odds with the collective nature of the Latino home culture (Gibson, 2002).

A common disparity between school and home culture is the competitive individualistic approach often favored in the school environment verses the collectivism valued by the Latino culture (Trumbull, Rothstein-Fisch, Greenfield, & Quiroz, 2001). An example of this discrepancy is the academic competitiveness through tracking practices and ranking students according to grade point averages that is prevalent in school systems as opposed to the cooperative culture, which supports success for the collective group, typically preferred by the Latino culture. As Spielhagan (2006) stated, the systemic tendencies toward ability tracking and competitiveness have done little to

close the achievement gap. Spielhagan explained that implementing a movement toward exposure to enriched curriculum for all students can increase school achievement and educational equity.

However, supporting all students in understanding higher-level concepts in a more rigorous, enriched curriculum necessary for Advanced Placement programs may require differentiated options (Vollmer, 2010). According to the College Board (2012), to increase the representation of minority and economically disadvantaged students in Advanced Placement coursework, school systems must commit to the establishment of additional student support systems such as summer preparatory programs and before and after school programs. In addition, the formation of collaborative school teams which focus on improved instruction and student success, the development of secondary curriculum vertically aligned to AP courses, the elimination of prerequisites for AP enrollment, and the implementation of peer mentoring and counseling plans are also recommended system changes (College Board, 2012). These changes have the potential to generate a more equitable and rigorous system that is beneficial for all learners and, in particular, high poverty minority students.

Teacher Expectations

In researching college pathways for students of color, Palmer, Maramba, and Dancy, (2011) determined that teacher encouragement was significant in increasing enrollments in Advanced Placement courses. This research also concluded that rigorous curriculum in elementary and secondary schools was important in AP participation. Exposure to advanced curriculum can potentially lead to increased student motivation

and improved adaptation skills (Greir, 2002). In commenting on teacher expectations and equitable learning environments, Nieto (1999) stated:

Teaching becomes much more complex when learning is based on the idea that all students have the ability to think and reason. Sociocultural and sociopolitical theories emphasize that learning is not simply a question of transmitting knowledge, but rather of working with students so that they can reflect, theorize, and create knowledge. (p. 47)

However, Singleton and Linton (2006) reported that underlying negative teacher “assumptions about the attitudes and abilities of students of color and their families are the basis for detrimental instructional practices” (p. 42). For example, the lack of critical thinking and rigorous teaching are common practice in secondary schools predominantly attended by minority students with low socioeconomic status (Betts, Rueben, & Danenberg, 2000; Nieto, 2000; Palmer, Maramba, & Dancy, 2011). Compounding these low expectations, high-poverty, high-minority schools also tend to have less experienced and less educated teachers (Betts, Rueben, & Danenberg, 2000; Palmer, Maramba, & Dancy, 2011). Change within school systems is necessary. To increase AP program access and equity for minority and low-income students, the College Board (2012) emphasized the importance of requiring content-specific professional development for pre Advanced Placement and Advanced Placement teachers.

Conclusion

Innovative educational leaders in school districts across the nation recognize the importance of increasing access to equitable, high-level educational opportunities for all students. Yet, significant disparities in academic performance persist. Issues relating to poverty, racism, immigration, culture, language, and gender all significantly impact Latino student performance. School practices concerning how systems provide access to

advanced pathways and how teacher expectations impact student success are important factors to consider in providing access to Advanced Placement courses for Latino students.

According to Vollmer (2010), America's schools were never intended to educate all students to high levels. Vollmer claimed school systems were designed to educate a "small handful of thinkers and a great mass of doers according to the workplace needs of an agro-industrial society" (p. 41). However, twenty-first century jobs require additional skills. Today's schools must equip students with the tools to be successful in a rapidly changing global world where students need the critical thinking and inquiry they experience in Advanced Placement programs in order to prepare them for postsecondary education and future employment.

Casanova (2003) stated "Good schooling opens doors to worlds beyond our imagination. Our lives achieve significance beyond the daily routines when we learn about the world beyond" (p. 244). Advanced Placement coursework offers opportunities for all students to experience challenging lessons that include the rigorous and engaging critical thinking components necessary for a twenty-first century workforce (College Board, 2012). Educational leaders must recognize that advanced coursework is not solely for the elite, but for all students preparing for undiscovered opportunities in a changing world.

CHAPTER III

METHODOLOGY

The literature has shown that multiple social and educational influences negatively impact the academic performance of Latino students. However, little attention has been given to what school systems can do to increase the access to and equity in high school Advanced Placement (AP) programs for Latino students. This case study research presents a clear view of the following questions: (1) What are Latino students' perceptions of their access to Advanced Placement coursework at one public Colorado high school? (2) What are Latino students' perceptions of the equity in Advanced Placement coursework at one public Colorado high school?

As explained by Merriam (2009), a case study has the potential "to afford the reader the vicarious experience of having been there" (p. 258). In this case study, understanding the experience of Advanced Placement program participation, as viewed through the eyes of Latino high school students, will provide education leaders with an opportunity to access information not typically available to them. Case study research will also allow education leaders to understand a unique perspective of the equity in AP coursework in a manner that is less likely to create defensiveness and more likely to increase learning (Merriam, 2009).

Crotty (1998) defined methodology as an action plan which links the decision to employ particular methods and procedures used to gather data and connects the decision

to use those methods and procedures to determine the conclusions of the study. With that definition in mind, this qualitative case study was focused on generating a theory grounded in the data for the purpose of explaining how Latino students from one high school experience the access to and equity in Advanced Placement coursework. Implicit in accomplishing this objective was the critical theorist's desire to comprehend and transform social and systemic academic barriers faced by Latino high school students (Creswell, 2007). According to Lincoln and Guba (2000), constructed meanings by critical theorists historically engage in objective description and attempt to raise awareness of positive social change. By using context-dependent focus group inquiry with Latino high school students in various academic pathways, this comparative case study utilized the data to construct meaningful explanations and provide insight into future research (Creswell, 2007).

As outlined by Crotty (1998), the final step in outlining the methodology of a study is to explain the epistemology central to the theoretical perspective. While critical inquiry helped to make meaning of the students' feelings, a constructivist approach was used to interpret that meaning (Charmaz, 2006). Creswell (2005) defined a constructivist perspective as one that includes multiple views, complexities, and realities of particular worlds. From the student focus group interviews, the researcher used the data to construct meaning surrounding their beliefs about how Latino students experience access to and equity in Advanced Placement programs in their high school.

Research Questions

To gain a more in-depth understanding of the central question concerning Latino high school students' experience in their pursuit of Advanced Placement programs at one Colorado high school, the following questions are considered:

- Q1 What are the Latino students' perceptions of the systemic structures and educational practices within the high school that support access to and equity in Advanced Placement programs for Latino students?
- Q2 What types of Advanced Placement program experiences do Latino students have in the high school as compared to White students?

Research Setting

Encompassed within this research was a case study to explain the academic experiences of Latino students enrolled at Pioneer High School. Selection criteria included a high school with Advanced Placement programs and at least 55% Latino student enrollment. School district approval for the study was acquired through a meeting with the district's assistant superintendent and following the district's research approval process. The Pioneer High School principal was informed of the study, and a principal consent form was signed. The research was approved by the University of Northern Colorado's Institutional Review Board (see Appendix B).

Located within a school district of nearly 20,000 students, Pioneer High School was one of three comprehensive public high schools within the district. Preliminary pilot studies were conducted at the other two high schools in the district by the investigator and research partners. Findings of these smaller studies indicated the need for additional in-depth research into the systemic factors that inhibit and /or encourage Latino student participation in Advanced Placement programs.

Pioneer High School has a diverse student population of approximately 1,440 students in grades 9 through 12. District records indicated that currently 63% of the students are Latino and 31% are White. Table 1 displays the percentage of Latino and White student enrollments at the school for the past four years.

Table 1

Percentage of White and Latino Student Enrollments by Year at Pioneer High School

	2009	2010	2011	2012
Latino	52%	59%	60%	63%
White	44%	34%	34%	31%

Table 1 indicates that Latino student enrollment at Pioneer High School has increased steadily over the past four years. These percentages are similar to the other two high schools in the district. Twenty-two percent of the high school's student population is enrolled in at least one Advanced Placement course. Of those students enrolled in an AP course, 35% are Latino and 62% are White, which is inversely proportional to the ethnic enrollments at the school.

Fourteen Advanced Placement courses are offered at the school. The specific AP courses are Art, Biology, Calculus, Economics, English Literature and Composition, English Language and Composition, Government, History, Human Geography, Music Theory, Physics, Psychology, Spanish Language, and Statistics. Of the 14 different Advanced Placement teachers, 14% are Latino and 86% are White. The AP teachers have an average of eight years of teaching experience, 64% have master's degrees, and 71% of the teachers also teach an honor's level course in their content area. All of the AP

teachers have attended at least one week-long AP College Board training in their Advanced Placement subject and 77% have attended the specialized training more than once.

Research Participants

Merriam (2009) explained that after the selection of the actual case in the case study, a purposeful sampling of participants within the case is typically the next level of sampling. When conducting a case study, Creswell (2007) preferred to select purposeful samples that portray various perspectives depending on the case. In order to capture various perspectives of the equity in and access to Advanced Placement programs for Latino students at the selected high school, a purposeful sampling based on the academic grades and AP participation of both Latino and White students was conducted. Including both Latino and White students who have experienced defined levels of academic success allowed for a more complex and complete investigation of the case.

Understanding the grading policies of the participating school was necessary for a thorough description of the participant groups. Course grades are based on the following scale: A for averages of 90 to 100; B for averages of 80 to 89; C for averages of 70 to 79; D for averages of 60 to 69; and F for averages of 59 or lower. A grade of incomplete or “I” is sometimes given to students requiring additional time to complete a course due to unusual personal circumstances. Students given an incomplete have a limited time to complete the course requirements.

Course grades were used to calculate each student’s Grade Point Average (GPA). For the students at Pioneer High School, GPA was determined by the following scale: A was valued as 4.0; B was valued as 3.0, C was valued as 2.0; D was valued at 1.0, and F

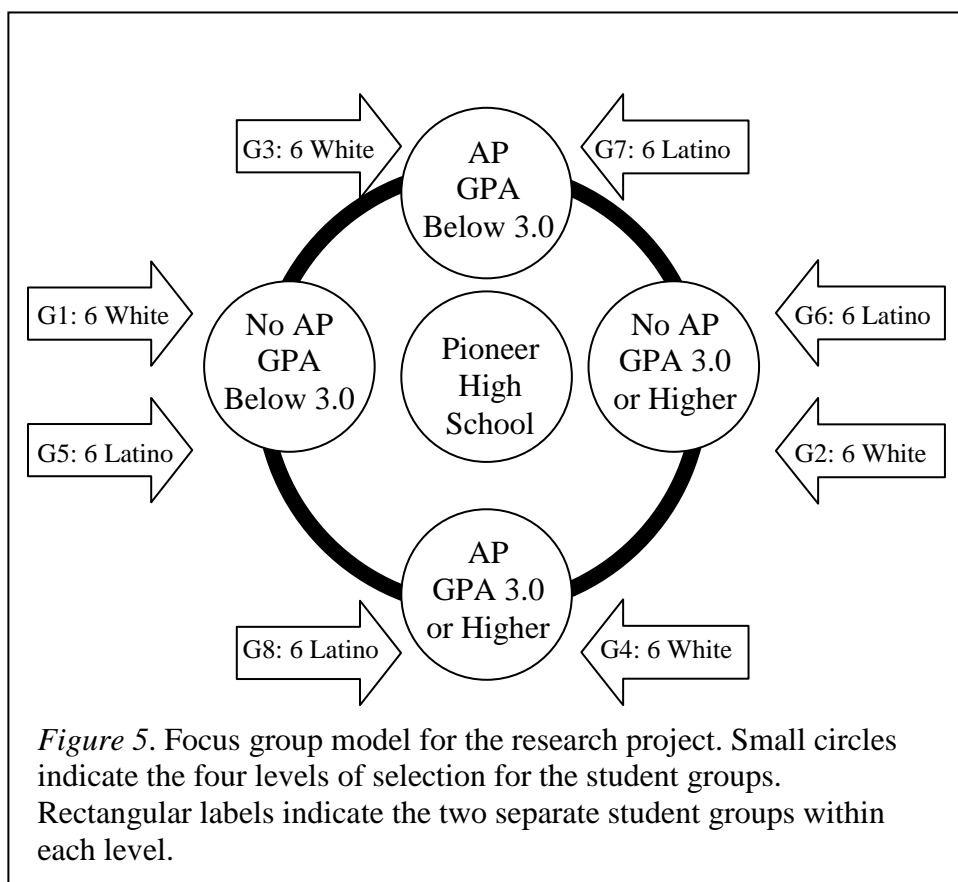
was valued as 0.0. Incomplete grades were not used in the calculation of the GPA. In Advanced Placement courses, dual credit college courses, or courses taken at a university or community college, grades of A, B, and C were scaled at a higher or weighted grade value. The weighted grades were calculated as follows: A was valued as 5.0; B was valued as 4.0, and C was valued as 3.0.

Twenty-four Latino students and 24 White students from Pioneer High School, determined from school records to be full time juniors who had attended the school since their freshman year, were purposefully identified for the study. Juniors were identified for the study because seniors had graduated and were not as readily available for participation in the study and students in grades lower than juniors typically were not enrolled in Advanced Placement courses. Six students in each group were sent invitations to participate in the study with the goal of interviewing four students in each of the eight groups. The students were selected based on GPA and Advanced Placement participation and grouped in the following manner:

- 1) Group 1: No AP Class Enrollment, GPA Below 3.0, White –
six White students enrolled in no Advanced Placement courses and maintaining a cumulative high school GPA below 3.0;
- 2) Group 2: No AP Class Enrollment, GPA 3.0 or Higher, White –
six White students enrolled in no Advanced Placement courses maintaining a cumulative high school GPA of 3.0 or higher;
- 3) Group 3: Enrolled in at Least One AP Class, GPA Below 3.0, White –
six White students enrolled in at least one Advanced Placement course and maintaining a cumulative high school GPA below 3.0;

- 4) Group 4: Enrolled in at Least One AP Class, GPA 3.0 or Higher, White –
six White students enrolled in at least one Advanced Placement course and
maintaining a cumulative high school GPA of 3.0 or higher;
- 5) Group 5: No AP Class Enrollment, GPA Below 3.0, Latino –
six Latino students never enrolled in an Advanced Placement course and
maintaining a cumulative high school GPA below 3.0;
- 6) Group 6: No AP Class Enrollment, GPA 3.0 or Higher, Latino –
six Latino students never enrolled in an Advanced Placement course and
maintaining a cumulative high school grade point average of 3.0 or higher;
- 7) Group 7: Enrolled in at Least One AP Course, GPA Below 3.0, Latino –
six Latino students enrolled in at least one Advanced Placement course and
maintaining a cumulative high school GPA of below 3.0;
- 8) Group 8: Enrolled in at Least One AP Class, GPA 3.0 or Higher, Latino –
six Latino students enrolled in at least one Advanced Placement course and
maintaining a cumulative high school GPA of 3.0 or higher.

A total of 48 students were identified using the above criteria by the school counselors to ensure that an in-depth description of the advanced academic programs at each school was presented without diluting the analysis with an oversized sample (Creswell, 2007). Gender, socioeconomic status, and English language skills did not influence the selection criteria as the total population in each of the eight identified groups was small and further limitations would restrict sample sizes. Figure 5 illustrates the structure of the eight focus groups for the study.



Data Collection and Analysis

After students were purposefully selected, the participants were informed of the research project details by letters sent to their homes. Students and parents were provided with informational materials describing the purpose of the research, the projected data handling, and the data analysis procedures. The written description of the study sent to each home included the purpose of the research, data collection procedures, data handling, and expectation of confidentiality.

Participants in this study were asked to take part in a single focus group interview with other students matched by the previously described selection criteria. Since the students were purposefully selected using ethnicity, personal academic performance, and

Advanced Placement course enrollments, they potentially had differing views of the access to and equity in the AP programs at the school. Therefore, the eight focus groups consisted of up to six students each, matched by their school, their ethnicity, and one of the four previously detailed selection criteria. Since the research was conducted during summer break and not all of the participants were available, only seventeen students actually participated in the focus group research. Although small in size, this focus group method of investigation provided an optimum atmosphere for exploring a deeper understanding of complex issues (Merriam, 2009; Morgan, 1998). Students who decided not to participate after the study started were not replaced due to time constraints.

Creswell (2007) stated that the research setting should be authentic and familiar to participants. Facilitated by the researcher, focus group interviews were situated on the school campus in a classroom that provided privacy. The eight focus group interviews were conducted at Pioneer High School during an agreed upon time during the school day. No interpreters were necessary.

In a brief meeting prior to beginning of each focus group interview, participants submitted signed consent forms and were given focus group norms, protocols, and confidentiality procedures as defined by Patton (1987), Morgan (1998), and Bloor, Frankland, Thomas and Robson (2001). The norms also reinforced the students' voluntary participation rights. The students were informed that their participation was voluntary and their decision to participate or not to participate did not impact grades in their academic records. Students agreeing to voluntarily participate in the research project signed an assent form and submitted a signed parental consent form.

Prior to beginning the focus group, participants were provided with a copy of the open-ended interview questions. As suggested by Merriam (2009), questions were open-ended in a semistructured format to allow for personal views to emerge. A semistructured format allowed for comparability in the follow-up data analysis but remained flexible enough so the researcher was able to ask probing questions when additional topics surfaced.

Interview questions were pre-determined and interview protocols were directed by guidelines for conducting effective focus group interviews as discussed by Patton (1987), Morgan (1998), and Bloor, Frankland, Thomas, and Robson (2001). The interview questions are listed in Appendix D. Each open-ended question was asked as scripted and each participant was invited to respond to each question in turn. Since the starting order of the participants could have potentially influenced responses, the order that participants responded to questions was changed from question to question. This format was used to decrease interviewer effect in asking questions and to increase response comparability in follow-up data analysis. After each question, participants were asked to summarize what they heard and add any additional comments. Using this formal approach increased participant comfort and willingness to share.

During the recorded focus group interviews and transcription, only first names were used. Each participant was encouraged to answer questions and share his or her experiences so that all students had an opportunity to speak. Participants were free to leave at any time during the focus group interview, but all participants remained for the entire focus group session.

The researcher took additional field notes during and after the focus groups. As suggested by Creswell (2007), immediately following the initial student meetings and each focus group interview, the researcher scheduled time to journal detailed personal notes, observations, and reflections. The focus group interviews were digitally recorded and professionally transcribed. Digital recordings and transcriptions of the eight student focus group interviews and all researcher field notes and journal notes used in the data analysis were maintained in a secured location and accessible only to the researcher and designated professors who supervised the data coding.

The data analysis occurred in phases. Merriam (2009) suggested that, in a case study, all information pertinent to the case should be organized into two stages of analysis: open coding and axial coding. To begin the analysis within each group, relevant information from each set of transcripts, researcher field notes, and researcher journal notes were coded. The researcher was interested in this study for reasons related to personal biases about equity and diversity issues regarding equal access and equal representation of Latino students in AP coursework both locally and nationally. Therefore during the initial coding process, the coding was supervised by two designated professors.

Remarks and questions were noted in the margin using a process called “open coding” since, to begin with, the researcher was open to all possibilities (Merriam, 2009, p. 178). Open coding allowed the researcher and professors to construct categories or emerging themes that encompass a developing pattern in the students’ understanding of access to and equity in Advanced Placement programs within their respective groups (Merriam, 2009; Creswell, 2007). In developing the categories, a constructivist approach

was used to allow the researcher flexibility to include “personal values, experiences, and priorities” during the open coding process (Creswell, 2007, p. 66).

After the open coding process was complete, the researcher used “axial coding” to reorganize the data into emerging themes to identify a core category or “central phenomenon” within the data from the eight focus groups (Creswell, 2007, p. 67). Axial coding allowed for constructive analysis relating the participant responses to the current literature. A constructive perspective allowed for the possibility of complex, multiple realities. According to Creswell (2007), data collection for a case study can employ a variety of procedures to construct a comprehensive representation of the case. This analysis method was flexible enough to allow for the possibility of complex and varied data encountered in this case study.

The researcher was open to all possibilities when interpreting the data. Since a single core category did not emerge, a constructivist approach was used. Charmaz (2006) defined this constructivist analysis approach as one that has the flexibility to consider the researcher’s view, explore concealed situations and relationships, and reveal power structures. Using this flexible approach allowed the researcher to adapt to the voices of the participants in providing an in-depth understanding of the case study.

Trustworthiness

Merriam (2009) stated that multiple methods of data collection allows for the triangulation or the comparing and cross-checking of data to ensure trustworthiness in qualitative research. The triangulation process typically uses “corroborating evidence from different sources to shed light on a theme or perspective” (Creswell, 2007, p. 208). Three data sources to infuse trustworthiness into the case study were used: (1) focus

group interview transcripts; (2) student records from Pioneer High School indicating ethnicity, grade level, grades in AP classes, and grade point averages; and (3) researcher field notes and journal observations. Using these three methods of data collection ensured that observations and interpretations were triangulated (Creswell, 2007; Merriam, 2009).

Creswell (2007) recommended that, in addition to triangulation among diverse data sources, qualitative researchers should use at least one additional valid procedure to address trustworthiness. One such strategy that assists with internal trustworthiness is to solicit feedback from the people interviewed for the research (Creswell, 2007; Merriam, 2009). Merriam (2009) explained that requesting feedback on the emerging findings from participants, called “member checks” or “respondent validation,” will augment internal validity (p. 217). In order to avoid misinterpreting interview statements through personal bias or misunderstanding, the preliminary case study analysis was mailed to all participants with postage return envelopes as an additional measure of internal trustworthiness. Creswell (2007) referred to the member checking step as an important step in creating credibility in a qualitative study.

Additionally, this study focused on the fact that, along with the students’ beliefs and experiences about their academic pathway, the researcher’s subjectivities also influence data interpretation (Charmaz, 2006). Creswell (2005, 2007) believed that a grounded theorist brings personal beliefs, understandings, and priorities into the research and those subjectivities should be disclosed prior to beginning a research endeavor. Crotty (1998) reiterated the importance of stating and clarifying researcher subjectivities as an important step in enhancing trustworthiness when he stated the following:

The long journey we are embarking upon arises out of an awareness on our part that, at every point in our research – in our observing, our interpreting, our reporting, and everything else we do as researchers – we inject a host of assumptions. (p. 17)

The impact that personal experiences could have on this research and the subsequent conclusions is important to understand. In an attempt to disclose personal prejudices, viewpoints, and assumptions, the researcher's subjectivities and philosophical framework are openly explained in the following paragraphs.

With over 25 years of experience, working as a classroom teacher, department chair, and administrator I was exposed to an educational system that is tolerant to institutional racism through segregated classrooms and systemic barriers. Currently employed as a district administrator with numerous classroom visitations to the school in this research project, I have conducted professional development for many of the teachers in the district and have had data conversations regarding the inequities in the Advanced Placement program.

In the district where I work, Latino students are typically underrepresented in honors classes, Advanced Placement courses, and gifted programs. Although the majority of high schools I work with claim to emphasize high expectations for all students, my experience leads me to the realization that not all faculty members honor that belief. Some teachers, while claiming they want to help all students achieve, portray low expectations concerning the aspirations and capabilities of the Latino student population. My supposition is that those low expectations may negatively influence the general academic performance of Latino students.

Conclusion

The purpose of this research project was to construct a comprehensive and detailed description of the advanced academic pathways experienced by Latino students at Pioneer High School. As explained through the voices of the students, this research supports educational leaders in a deeper understanding of the issues affecting equity in and access to Advanced Placement programs for all students. Using eight focus groups and specific procedures for data analysis, Latino student perceptions juxtaposed with White student perceptions were used to construct a clear picture of the access to and equity in the school's AP programs.

Open coding was used to allow for emergent categories or themes from eight unique student focus groups. Axial coding was used to define a core category or central phenomenon. The researcher used a constructivist perspective to construct meaning and connect the literature, the data, and the final conclusions. Chapter IV provides a description of each research participant and an analysis of the qualitative data.

CHAPTER IV

FINDINGS

Collecting different types of data about the participants, substantiating data through various sources, and interviewing students with dissimilar experiences and perspectives are strategies for ensuring trustworthiness during analysis (Merriam, 2009). Consequently, researcher notes, transcribed interviews from student responses, and school records were used to construct meaning surrounding participants' perceptions of the systemic structures and educational practices within Pioneer High School that support access to and equity in Advanced Placement (AP) programs for Latino students.

Crotty (1998) indicated that a constructivist approach suggests that every individual's perception of their environment "is as valid and worthy of respect as any other" (p. 58). Therefore, a description of themes and topics that emerged from the interviews and additional school data that clarify the participants' academic experiences will help determine a deeper understanding of the issues that contribute to the underrepresentation of Latino students in Advanced Placement programs. Honors course enrollment, teacher recommendations, and the AP registration processes emerged as main themes that impact Latino AP enrollment. In addition, several topics arose from the interviews which revealed differing AP program experiences for Latino participants as compared to White participants. How Latino and White students viewed the personal benefits of AP enrollment, the fears associated with AP enrollment, and the role of family

and peers in enrollment decisions were topics that evolved from the focus group discussions.

These themes and topics mapped the journeys that guided the 17 participating students at Pioneer High School towards their high school course selections. Merriam (2009) stated that the final product of a qualitative case study should encompass a “thick description” of the particular situation using as many details as possible in order to discover new insights (p. 43). The following detailed portrayal of each focus group participant will develop a thorough picture of each student’s experience at Pioneer High School. An extensive account of the school’s climate will also reveal details about the school that will establish key trends important in the analysis of the study.

Focus Group Participants

Due to parameters established by the school principal, focus groups for this project were held one week after school was dismissed for the summer. Six eligible students from each of the eight target areas were sent participation letters. The 48 students receiving letters had just completed their junior year at Pioneer High School.

Of the 48 students that were sent letters inviting them to participate in the study, 17 students, eight White students and nine Latino students volunteered to contribute to the research project. Students were given \$20.00 for their participation. Of the eight White students, four were female and four were male. Of the nine Latino students, six were female and three were male. Groups 1 through 3 had only one participant. All of the other groups had two or more participants. Table 2 displays the number of participants in each of the eight groups.

Table 2

Number and Gender of Participants in Each Group

Group	Description	Participants	Gender
1	White, No AP Enrollments, GPA Below 3.0	1	1-F
2	White, No AP Enrollments, GPA 3.0 or Higher	1	1-M
3	White, AP Enrollments, GPA Below 3.0	1	1-M
4	White, AP Enrollments, GPA 3.0 or Higher	5	3-F, 2-M
5	Latino, No AP Enrollments, GPA Below 3.0	2	1-F, 1-M
6	Latino, No AP Enrollments, GPA 3.0 or Higher	3	2-F, 1-M
7	Latino, AP Enrollments, GPA Below 3.0	2	2-F
8	Latino, AP Enrollments, GPA 3.0 or Higher	2	1-F, 1-M

Note: F = Female, M = Male.

Interviews were held in a classroom on the first floor in the main building. The classroom used during the interviews was an older room where Spanish classes were taught. The room was large with massive windows. Walls in the classroom were filled with numerous newspaper clippings of past sports triumphs, student photos, teacher awards, and aged posters of Mexico. A grouping of Spanish words mounted on the wall in the front of the room created a vocabulary collage. Several older desktop computers in a student work station, an outdated television in the front of the room, and a ceiling mounted projector were the only technology equipment visible in the room. In addition, 30 student desks, a teacher desk, several work tables, two small bookcases, and four filing cabinets furnished the large classroom space with extra room to spare.

The professionally transcribed digital recording of the interviews produced over 100 pages of text used by the researcher in the coding process. School transcripts for each of the 17 participants were collected and analyzed to outline a comprehensive account of each participant's course enrollments and course grades earned at Pioneer High School. Participants typically enrolled in eight classes per semester. With two semesters per year, most participants enrolled in 16 courses per year for the first two years at Pioneer. However, course enrollments for those first two years varied from 15 to 18. During their junior year, enrollments for the participants varied from nine to 15. The grade point average (GPA) for each participant was calculated from grades that included their freshman and sophomore years, and the first semester of their junior year. Researcher notes written during and immediately after each focus group, transcribed interviews, and school records were used to provide the following detailed portrayals of all 17 participants. Pseudonyms were used to protect the participants' confidentiality.

**Group 1 (G1): White Students,
No Advanced Placement,
GPA Below 3.0**

One female student participated in the group 1 research questions. She is a White student with no Advanced Placement course enrollment and a GPA below 3.0.

Jodie. Jodie (G1), GPA 2.388, had taken no honors or Advanced Placement courses throughout her high school career. She was enrolled in grade level courses her freshmen year and earned three Ds, six Cs, three Bs, and four As. The higher grades were typically in elective courses areas verses core academic areas. During her sophomore year she earned one F in an English class, three Ds in English and math, five Cs, five Bs, and two As. Again, the upper grades were earned in elective courses with the exception

of one B in History. Jodie did not enroll in a foreign language class during her first three years of high school.

Jodie (G1) was quiet and often gave short responses to the research questions. While she shared that art was important to her, school records indicate that Jodie took one semester of Art and Design as a freshmen, Ceramics I and Drawing I as a sophomore, and Drawing II as a junior. Although the school offers an arts magnet program, the small number of art classes in her transcript did not seem to reflect the schedule of a student with an interest in art. Jodie exhibited a lack of self-confidence when asked about her enrollment in Advanced Placement programs at the school. She stated, “I’ve heard they are really hard to get into and that you also have to get a teacher’s signature to do it. But I’m not sure if I could actually get through an AP class.” Jodie indicated that she had never been encouraged to enroll in an AP course. She also was not able to articulate a clear understanding of what courses were offered in the school’s AP program. Neither her friends nor any of her family members had ever discussed Advanced Placement program enrollment with her.

**Group 2 (G2): White Students,
No Advanced Placement,
GPA 3.0 or Higher**

One male student participated in the group 2 research questions. He is a White student with no Advanced Placement course enrollment and a GPA 3.0 or higher.

Calvin. Calvin (G2), GPA 3.0, had taken no honors or Advanced Placement courses throughout his high school career. However, he did accelerate in science his freshmen year by enrolling in Biology which is typically a sophomore course. With the exception of science, Calvin was enrolled in grade level courses his freshmen year and

earned a D in Biology, a C in English, and eight Bs and five As in various other subjects. The higher grades were earned in both elective courses areas and core academic areas. During his sophomore year he earned one D in math, two Cs in Chemistry, and five Bs and two As in his other courses. Calvin took German I, II, and III during his freshmen, sophomore, and junior years in high school.

Calvin (G2) was at ease answering the research questions. He mentioned that his family had just returned from a vacation in South America, and he shared highlights of the trip prior to the interview. Calvin was amicable while answering the research questions, but indicated that there was an abundance of social drama within his group of friends. In addition, he indicated that he was proud of his sibling's glowing academic accomplishments, but that he would never live up to his brother's exemplary academic reputation.

Calvin (G2) further discussed a general concern about not being as good academically as other students and not believing he was a good student. He stated, "I never thought very highly of myself when it comes to school. People around me are always doing better than me." When probed about his academic experiences, Calvin said some of his teachers were "irritating" and tended to "pick on" him. He also indicated that his freshman math teacher was unsupportive and that particular negative experience made him feel as though he was not a good student.

When asked about AP enrollment, Calvin (G2) stated that a few teachers had talked to him about taking AP classes. However, he believed the advanced classes would be too much work and he was afraid to fail a course. In describing his work ethic, Calvin confessed, "I tend to have a lack of effort in my classes and just kind of do the bare

minimum to get by. I just want to get my credits out of the way without more work than I have to do. I kind of tend to take the bare minimum.” Calvin indicated that both his parents and brother had also talked to him about AP course enrollment but each offered different advice. Calvin’s parents thought the AP classes might be too difficult and discouraged enrollment while his brother believed that Calvin should enroll in AP Environmental Science.

**Group 3 (G3): White Students,
Advanced Placement Course
Enrollment, GPA Below 3.0**

One male student participated in the group 3 research questions. He is a White student with at least one Advanced Placement course enrollment and a GPA below 3.0.

Mitch. Mitch (G3), GPA 2.976, was enrolled in honors or Advanced Placement courses throughout his freshman, sophomore, and junior years. He was also enrolled in Jazz Ensemble, band, and choir all three years. Enrollments his freshmen and sophomore year in math and science were at grade level and enrollments in English and social studies were accelerated. His freshmen year he earned four Cs in math and Honors English, a B in acting, and nine As in a variety of other courses. The higher grades were earned in both elective courses areas and core academic areas. During his sophomore year, he earned a D in math, two Cs in Chemistry, five Bs, and two As in various other core and elective subjects. Mitch took German I and II during his sophomore and junior years. He completed AP Language and Composition, AP United States History, and AP Economics during his junior year, earning one C, three Ds, and one F in those Advanced Placement courses.

Mitch (G3) was personable and talkative. His transcripts show 18 semesters of music classes from his freshmen to junior high school years. He was enthusiastic about school and stated, “This school has so much to offer. I am in the Arts Magnet Program, and it’s one of the big reasons why I came here.” Although the majority of his academic classes did not produce stellar grades, he indicated that school had been a positive experience.

Mitch (G3) was influenced by teachers and parents to enroll in AP classes. He believed that enrollment in the freshman honors program supported his pathway to AP. Mitch credited his honors enrollment to teacher recommendations. Similarly, his friends were also influential in the classes he selected. Mitch indicated that his peer group, which had been together since kindergarten, encouraged and supported each other in honors and AP classes. He stated, “We all want to help each other pass.”

**Group 4 (G4): White Students,
Advanced Placement
Enrollments, GPA
3.0 or Higher**

Five students, three female and two males, participated in the group 4 research questions. Students in this group are White students with at least one Advanced Placement course enrollment and GPAs of 3.0 or higher.

Arnold. Arnold (G4), GPA 3.135, had taken both honors and Advanced Placement courses throughout his high school career. During his freshmen year, he was enrolled in grade level courses in English and honors courses in social studies. He was also enrolled in accelerated math and science courses. His sophomore year he was enrolled in Honors English and Honors United States History and Government while continuing his accelerated path in math and science. As a freshman, Arnold earned two

Cs in accelerated math and Honors United States History and Government and seven Bs and six As in his other content and elective classes. He was also enrolled in band during his freshmen year. Sophomore year, he earned one F in Algebra II and two Ds, three Cs, two Bs, and eight As in his other courses. The higher grades were typically earned in elective classes. Arnold took German I, II and III during his freshmen, sophomore, and junior years in high school. He enrolled in AP Environmental Science his junior year, earning a D and a B in the two semester course.

Arnold (G4) had two older brothers that were both enrolled in Advanced Placement classes as sophomores. Arnold shared that his brothers made fun of him because he did not enroll in AP classes as early as they did. His parents encouraged AP program participation because they thought regular classes would not be challenging enough. Arnold stated that his parents believed that he does not fully apply himself in his classes. However, he claimed his brothers, parents, and teachers did not influence his decision to enroll in an Advanced Placement course. He stated that his enrollment in the AP Environmental Science class was because the course sounded interesting. Arnold claimed that he took the class solely for the increased knowledge and enjoyment that learning brings. He stated, “you take it [the Advanced Placement class] for the sole purpose of just enjoying it.”

Baker. Baker (G4), GPA 3.592, had taken both honors and Advanced Placement courses throughout his high school career. He was enrolled in honors level courses his freshmen year in English and social studies and participated in accelerated math and science courses. His freshmen year, he earned six Bs and 12 As. He was also enrolled in Spanish II during his freshmen year. His sophomore year he was enrolled in honors

English and Honors United States History and Government while also continuing his accelerated path in math and science. While in his sophomore year, Baker earned three Cs in a dual credit Honors Trigonometry course and a computer programming course, and six Bs and six As in content and elective courses. Advanced Placement Statistics was also taken during his sophomore year. He earned a C and a B in that two semester AP class. During his junior year, Baker completed AP Language and Composition at the high school, earning Bs both semesters. He was also enrolled in Physics, Calculus I, and Calculus II at a local community college, where he earned one B and two Cs in the one semester courses.

Baker (G4) explained that enrollment in Advanced Placement classes was his personal decision. His parents, teachers, and his friends were not influential in his decision to enroll in AP classes. Baker learned about AP programs while attending an awards ceremony at school and, after that event, decided that taking AP classes was important. When asked about AP access, he indicated that students needed to take the proper prerequisite classes. For example, he explained that students must complete Trigonometry and Pre-Calculus to enroll in AP Calculus. Although Baker thought anyone could access AP classes that did not require prerequisites, he was unsure how students qualified for AP enrollment in general.

Baker (G4) indicated that most of his friends are enrolled in Advanced Placement classes. He also claimed that he felt like the smart student among his peers, especially among those students who were not in the AP program. Receiving college credit for Advanced Placement class enrollment was especially important to Baker, and he expressed concern over the possibility of not passing the AP exams at the end of the

course. By enrolling in courses at the community college during his junior year, Baker's passing grade in the class automatically provided him with college credit without having to pass the rigorous Advanced Placement exam.

Natalie. Natalie (G4), GPA 4.118, was enrolled in Honors English and Honors United States History and Government during her freshman and sophomore years and was also accelerated in math. She earned 16 As during her freshmen year. Sophomore year she also earned As in all 16 of her classes. Natalie enrolled in French II during her freshmen year and French III during her sophomore year. She completed AP Language and Composition and AP Psychology during her junior year, earning all As in those courses. Natalie was also enrolled in Trigonometry, a dual credit math course which allows students to earn both high school and college math credits while enrolled at Pioneer.

Enrollment in challenging and interesting courses was important to Natalie (G4). She claimed those attributes were her main motivation for taking AP classes. Earning college credit was also a factor in her decision to enroll in AP classes. Both her sister and her school counselor encouraged Natalie's AP program enrollment. Natalie indicated that her parents did not allow grades lower than A's but, other than that, she was allowed to determine her high school class schedule. All of her friends were enrolled in AP classes. However, they did not typically take the same AP classes. Natalie believed her friends enrolled in easier AP classes, and they did not understand why she took the more challenging AP classes.

Natalie (G4) stated that access to AP enrollment was open to any interested student. She specified that, although teacher approval was required for AP course

enrollment, teachers were agreeable to allowing most students into AP classes. However, she conceded that not all students were allowed to enroll. Natalie explained that teachers, “basically know who you are and, if they think that it [the Advanced Placement class] would be too hard for you, they will suggest a little easier class.”

Patsy. Patsy (G4), GPA 4.011, was enrolled in Honors English and Honors United States History and Government and Honors World History her freshman and sophomore years and was accelerated in math and science. During her freshmen year, she earned two Bs in word processing and photography and 14 As in various other courses. The higher grades were typically in accelerated core academic areas. Sophomore year, she earned one B in Honors Algebra II and 15 As in her other courses. Patsy enrolled in Spanish I and II during her sophomore and junior years and AP Language and Composition during her junior year, earning all As in those courses. She also enrolled in a dual credit math course, College Algebra, which allows students to earn both high school and college math credits while still at Pioneer. Although she successfully completed honors level social studies courses her freshmen and sophomore years, Patsy did not enroll in an AP social studies class her junior year.

Patsy (G4) indicated that she was encouraged by teachers to enroll in AP classes. However, she felt strongly that students should take AP classes for the personal sense of accomplishing a difficult goal. Most of her friends were also enrolled in AP classes. Her parents also supported her AP participation.

Pauline. Pauline (G4), GPA 3.85, was enrolled in Honors English and Honors United States History and Government and Honors American History her freshman and sophomore years and was accelerated in math and science. She earned one B in

Geometry and 15 As in all of her other courses during her freshmen year. During her sophomore year, she earned one C in Honors English, five Bs in content classes, and 10 As. She enrolled in Spanish I, II, and III during her freshmen, sophomore, and junior years. Pauline took AP Environmental Science, AP Psychology, and AP Statistics during her junior year, earning two As and four Bs in those two semester courses. She was also enrolled in a dual credit math course, Trigonometry. Although she successfully completed Honors English courses her freshmen and sophomore years, she did not enroll in an AP English course her junior year.

In her very brief phone interview, Pauline (G4) did not seem enthusiastic about the questions. She was unfriendly and her answers were short. Pauline indicated that since she was an accelerated student, her parents were not involved in the AP courses she selected. She made all of the decisions about her AP participation.

**Group 5 (G5): Latino Students,
No Advanced Placement,
GPA Below 3.0**

Two students, one male and one female, participated in the group 5 research questions. These are Latino students with no Advanced Placement course enrollment and GPAs below 3.0.

Alejandro. Alejandro (G5), GPA 2.295, was enrolled in Honors United States History and Government only during his freshmen year. However, he did accelerate in math his freshmen year by enrolling in a math class typically for sophomores. During his freshman year, Alejandro earned six Ds, five Cs, two Bs, and three As. The higher grades were earned mainly in core academic areas. During his sophomore year, Alejandro earned one D in math, two C's in Chemistry, and five Bs and two As in his other courses.

He took Spanish I and II during his freshmen and sophomore years at Pioneer. His junior year he was enrolled in Trigonometry, a dual credit math course. The majority of his other junior year courses were less rigorous courses and, other than math where he earned Bs, his grades were mainly Ds. He failed a class called Life Management.

Alejandro (G5) appeared to be shy and usually looked up or down with little eye contact when he spoke. He was a tall student but had the demeanor of someone much smaller in stature. Alejandro shared about the academic difficulties that he had experienced in his classes when writing and thinking activities were assigned. Despite these difficulties, Alejandro claimed that all of his teachers and his father encouraged him to take honors and AP classes. He stated that conversations with his counselor mainly consisted of career exploration and not high school course selection. His friends were not involved in the Advanced Placement program, and they did not typically discuss the classes they were taking.

Anna. Anna (G5), GPA 1.609, had taken no honors or Advanced Placement courses throughout her high school career with the exception of an accelerated math class she took during the first semester of her freshmen year. After earning a failing grade in the accelerated semester I math course, Anna's counselor enrolled her in a math course she had previously completed and passed during her eighth grade year. Other than math, she was enrolled in grade level courses her freshmen year and earned four Fs in content classes and six Ds, three Cs, and one B in various elective and content courses. During her sophomore year, Anna also earned two Fs in math and six Ds in content classes. In addition, she earned three Cs, two Bs, and three As in elective classes. Anna enrolled in French I and French II during her first two years at Pioneer. She enrolled in less rigorous

courses her junior year, including a freshman course she had previously failed, and earned only 11 credits since she failed three courses.

Although Anna (G5) was friendly, had an exuberant personality, and spoke positively about school, she felt that bullying was an issue that made attending classes difficult. When speaking of the mistreatment toward her, Anna became emotional. She indicated that often she had feelings of inadequacy when it came to school. Anna claimed that her teachers, counselors, and administrators did not listen to her when she reported bullying incidents. She also claimed that she dressed differently from most other students. Consequently, Anna believed that she was made fun of at school because of her clothing. Anna's clothes for the interview were typical teenage attire with the exception of long fingernails that were each painted with different colors.

Anna (G5) claimed that she had a few friends enrolled in AP English and she thought the course sounded interesting. However, Anna indicated that after speaking with the AP English teacher about course enrollment, she learned that the class would probably be too difficult for her, so she did not enroll in the course. Following that experience, she claimed that her mother encouraged enrollment in an AP Psychology class, but Anna did not think that taking the AP course would be a good decision because she was fearful of the level of work required.

When asked about the role of school counselors in her academic decisions, Anna (G5) indicated that she did talk to her counselor about AP enrollment. However, since she only needed five more credits to graduate, Anna claimed that the counselor thought it was best to focus on taking the easier classes she needed for graduation. Anna also talked about her initial accelerated placement in math her freshmen year. She claimed, "They

tossed me in there [Honors Geometry] because in my 8th grade I passed math with a C.... I don't know how that worked."

**Group 6 (G6): Latino Students,
No Advanced Placement,
GPA 3.0 or Higher**

Three students, one male and two females, participated in the group 6 research questions. These are Latino students with no Advanced Placement course enrollment and GPAs of 3.0 or higher.

Laura. Laura (G6), GPA 3.665, had taken no honors or Advanced Placement courses throughout her high school career. She was enrolled in grade level courses her freshmen year and earned three Bs and 13 As. During her sophomore year, she also earned three Bs and thirteen As. Laura enrolled in Spanish II and III during her sophomore year, taking only a single semester of each. During her junior year, she earned As in Spanish IV and mainly Bs and Cs in her other classes. Other than Spanish, Laura had very few rigorous courses listed on her transcript.

Laura (G6) was proud of her ability to speak both Spanish and English fluently and felt that speaking two languages would help her in future job opportunities. She was personable and outgoing during the focus group interview. Earning good grades was important to her, but she indicated that she was careful to enroll in classes that were not too difficult. She talked about initially being enrolled in Honors English her sophomore year. However, she had to drop because she felt that she did not "fit in". She claimed that the teacher used big vocabulary words which made her feel inadequate. Laura also explained that she decided to withdraw from the Honors English class because the

teacher assigned summer work, and, since she did not have the opportunity to complete the summer assignment, she felt confused and behind.

Laura (G6) indicated that she plans to enroll in AP Spanish her senior year. One of her teachers recommended that she enroll in AP Spanish because she was “Mexican” and therefore would probably be successful in the class. Laura’s parents were most concerned about her course grades and were not involved in decisions on course registration. She claimed that her parents encouraged earning good grades, but not participation in the AP program.

Mariana. Mariana (G6), GPA 3.807, was accelerated in math during her freshmen, sophomore, and junior years. Her freshmen year she earned one B in a social studies class, and 16 As in all of her other classes. During her sophomore year, Mariana earned one C in Honors English, six Bs in content classes, and seven A’s primarily in elective classes. Mariana enrolled in French II and French III during her freshmen and sophomore years and German I her junior year. She earned all As in her 12 junior-year classes, including Trigonometry, a dual credit math course. Other than her accelerated math courses and one semester of Honors English, Mariana had very few rigorous courses listed on her transcript.

Mariana’s (G6) counselor placed her in Honors English during her sophomore year. Mariana shared that the placement in Honors English class during her sophomore year was challenging. She was not enrolled in Honors English as a freshman while most of the other students in her sophomore Honors English class had been enrolled the previous year. Mariana claimed that missing that additional year of experience left academic gaps. For example, she indicated that the honors class was difficult because the

teacher used unfamiliar vocabulary words that were learned the previous year. Although she passed her sophomore Honors English class, she stated that she never felt confident as an English student. Subsequently, she would not enroll in an AP English class.

Mariana thought that she might enroll in AP Statistics her senior year because she heard from friends that AP Statistics was an easier class than AP Calculus.

Mariana (G6) was shy during the interview, but expressed very strong opinions about school. She claimed she was confident in her academic abilities and expressed an interest in attending college. According to Mariana, her parents did not know about the Advanced Placement program, but they wanted her to earn good grades. Several of Mariana's friends were enrolled in AP classes. She confessed that her class schedule was often influenced by the courses her friends took and the credits she needed to graduate.

Ricky. Ricky (G6), GPA 3.420, had taken honors courses in social studies during his freshmen year and was also accelerated in math during his freshmen, sophomore, and junior years. In all other subjects, he was enrolled in grade level courses. His freshmen year he earned one D in the Honors United States History and Government class, two Cs in English and physical education, and four Bs and eight As in his other classes. Sophomore year, he earned one C in Biology and five Bs and 10 As in all of his other courses. Ricky was never enrolled in foreign language courses. He enrolled in dual credit Trigonometry in his junior year, earning a B in that one semester course. His junior year grades were mainly Bs; however, he earned a few As in elective classes like Beginning Guitar.

Other than math courses, few rigorous courses were listed on Ricky's (G6) transcript, and he believed that his only academic strength was math. He claimed that his

brother, mother, and girlfriend encouraged his participation in the Advanced Placement program. Ricky indicated that he was interested in taking AP Calculus next year.

However, he claimed that his teacher suggested that he should not take the AP Calculus course because of the rapid pace of the class. None of Ricky's friends were in AP classes. However, he believed that his friends were capable of doing the work required in an AP class but were "too lazy and unmotivated" to meet the challenge.

When beginning the focus group interview, Ricky (G6) claimed that he was shy, but he was well-spoken and friendly throughout the discussion. Ricky shared that he had a job playing in a band that featured Mexican music. He indicated that he was the youngest member in his band, as the other musicians are over 30 years old. Ricky was dedicated to earning good grades in school, but expressed concern about taking classes that were too difficult because of his very busy band schedule. Although music was a passion, he did not participate in school bands or orchestras and claimed that he did not care for the music classes at school. He valued a strong relationship with family and commented about being able to help the family financially with his band earnings. Although his mother was interested in Ricky receiving a good education and was proud of his academic accomplishments, he shared that earning money for the family was a priority over school. He explained that the payment of any fees associated with AP classes was a concern.

**Group 7 (G7): Latino Students,
AP Enrollment, GPA
Below 3.0**

Two female students participated in the group 7 research questions. These are Latino students with at least one AP course enrollment and GPAs below 3.0.

Juanita. Juanita (G7), GPA 2.454, was enrolled in Honors English her freshman and sophomore years where she earned Cs and Ds in the courses. She was not accelerated in math, science, or social studies during her first two years at Pioneer. She earned seven Bs and five As in other freshmen content and elective classes. Juanita enrolled in German I during her freshmen year and German II her sophomore year, earning Bs in those classes. While in her sophomore year, she failed both Biology and Computer Programming. She also earned two As in orchestra classes during her sophomore year.

Her junior year, Juanita (G7) enrolled in AP Psychology where she failed the first semester and passed with a D second semester. Juanita failed the first semester of AP Language and Composition in her junior year and dropped the course second semester. She also failed both semesters of Algebra II in her junior year and was enrolled in a below grade level science class.

Juanita (G7) was energetic and had a friendly personality. She was enthusiastic about her participation in the cross country team, but admitted that she was not involved in too many other extracurricular activities. Juanita was positive about her overall experience at Pioneer, but she expressed a lack of self-confidence about her academic ability. When talking about AP participation, she claimed that her teacher discouraged her enrollment by telling her that she would probably not do well in the AP class. Consequently, she did not enroll in the AP course. Juanita also indicated that she was proud of her sister because she was the first generation in her family to attend college. Like her sister, Juanita also shared her dreams of going to college and making a difference. In talking about her future goals, she stated, "I want to succeed. I want to be a part of helping the world."

Nina. Nina (G7), GPA 2.556, was enrolled in no honors courses her freshman year, but received 18 credits. She earned six As, nine Bs, and 2 Cs and one D in core classes. She was registered in a remedial math class but enrolled in four sections of band and Symphony Orchestra, earning all As in those electives. Although she earned a D for the first semester of her freshman English class, she earned an A during second semester and was subsequently enrolled in Honors English and Honors United States History and Government her sophomore year, where she earned one C and two Fs. As a sophomore, Nina was also enrolled in a freshmen level math class. The 16 credits she earned during her sophomore year included three As, four Bs, four Cs, three Ds, and two Fs. Six of those credits were related to music. Nina enrolled in a full year of German I during her freshmen year and one semester of German II during her sophomore year.

During her junior year, Nina (G7) enrolled in AP Psychology earning a C and a D, a low level math course earning a C and a D, and one semester each of sophomore English and German II to recover the credits she did not earn as a sophomore. She also failed a Human Anatomy and Physiology course and dropped a Career Internship class. Nina earned a total of 10 credits her junior year, none of which were music. Despite her success in the 10 music courses during her first two high school years, her transcripts indicate no additional music course enrollments after her sophomore year.

Nina (G7) was shy and portrayed a lack of self-confidence. Although she spoke highly of the Arts Magnet Program at school, her transcripts indicated a decline in her music grades from her freshmen to sophomore years. She did not register for any music classes her junior year. While talking about Advanced Placement participation, Nina stated that her AP enrollment was not encouraged by her teachers or counselors. Nina

further explained that she was personally discouraged from AP participation because her teachers did not notice her, and she was not recommended for the Advanced Placement program. She also indicated that her teachers were not always supportive of her, and she did not often get the help she needed to be successful.

Nina (G7) claimed that her participation in the Advanced Placement program was due to her own individual initiative. Her parents were unaware of the aspects of the school's AP program and believed that the AP classes were similar to the advanced classes offered in middle school. Nina claimed that, before enrolling in the Advanced Placement program, she did not completely understand the difference between a regular class and an Advanced Placement class. Some of Nina's friends were enrolled in AP classes. She believed that her friends currently enrolled in AP classes were recruited by teachers for AP course enrollment.

**Group 8 (G8): Latino Students,
Advanced Placement
Enrollment, GPA
3.0 or Higher**

Two students, one male and one female, participated in the group 8 research questions. These are Latino students with at least one Advanced Placement course enrollment and GPAs of 3.0 or higher.

Angelina. Angelina (G8), GPA 3.793, was enrolled in Honors English and Honors United States History and Government her during her freshmen year. Although she earned mainly Bs and Cs in her honors classes, she earned As in the rest of her classes. During her sophomore, year she enrolled in Honors World History earning Bs both semesters. Otherwise, the remainder of her sophomore schedule included an abundance of less rigorous courses. Angelina's transcripts recorded classes in Child

Development, Word Processing, Acting I, Speech Communication, Field and Court Sports, and Dance III. She earned 11 As, mainly in elective courses, and five Bs in core courses. Angelina enrolled in Spanish I during her freshmen year, Spanish II during her sophomore year, and Spanish III her junior year. She earned six As in those classes.

Although Angelina (G8) never enrolled in any art classes her freshmen or sophomore year, as a junior, she enrolled in AP Art History, earning As for the two semester course. She also enrolled in AP Environmental Science, earning two Bs. Angelina earned a total of 14 courses during her junior year. She earned 10 As and four Bs in mainly rigorous courses.

Angelina (G8) claimed that her AP enrollment was mainly encouraged by her friends. She also stated that her parents believed she was smart, and they expected her to take rigorous classes. Angelina recalled that she was enrolled in one middle school honors class, and that, when she registered for high school, she was automatically placed in all honors classes. Although she believed that she was enrolled in accelerated courses, Angelina's transcript revealed that she was enrolled in only three honors level courses in two subject areas during her freshmen and sophomore years. When asked about registering for additional AP classes her senior year, Angelina claimed that the only AP class available to her was AP Chemistry. According to the school's course registration catalog, she could actually register for 15 AP classes in addition to AP Chemistry.

Gerardo. Gerardo (G8), GPA 3.611, was enrolled in Honors English, Honors Geometry, and one semester only of Honors United States History and Government during his freshman year. He earned four Bs and one C in those classes. In the 16 courses he took during his freshman year, Gerardo earned 11 As, four Bs and one C. During his

sophomore year, he enrolled in Honors English, Honors Algebra II, and Honors United States History where he earned three Bs, two Cs, and one D. Gerardo earned a total of 16 credits his sophomore year. His grades included nine As, four Bs, two Cs and one D. Gerardo earned all As in Spanish II and III his freshmen and sophomore years.

Despite never enrolling in a Spanish IV class, Gerardo (G8) enrolled in AP Spanish his junior year where he earned two As. He also earned two Bs in AP Psychology during his junior year and two As in a dual credit math course, College Algebra. Gerardo was never enrolled in music or art classes. His junior year schedule consisted of 10 rigorous content courses, where he earned six As, two Bs, and two Cs, and three elective courses. He earned all As in those elective courses.

Although he claimed that he loved school and the support he received from teachers, Gerardo (G8) reported that he received no teacher or counselor encouragement for his enrollment in the Advanced Placement program. He shared that his AP participation was due to his own personal desire to challenge himself academically by taking rigorous courses. Neither his parents nor friends inspired his AP enrollment. Gerardo indicated that only a few of his friends are enrolled in AP classes. When asked about why some of his friends do not take AP classes, Gerardo explained, “They don’t really apply themselves I guess. They think that they are not smart enough.” Employment was important to Gerardo, and his future goals were to earn money to help his family.

Each of the 17 participants remained for all questions during the interviews. Despite some difficult topics, issues, and concerns that were shared during the discussions, the participants were amicable throughout the question and response process. Participants collectively shared positive comments about the climate at Pioneer, and

largely held the school and staff in high regards. Along with an historic perspective of school's past, various topics involving the school's climate materialized from transcript interviews and will be shared in the following section.

School Climate

Built in the 1920s, Pioneer High School's history is connected to multiple generations of past graduates still living in the community. Currently, 1,439 students are enrolled in grades 9 through grades 12 at Pioneer. Characteristics of the high school include an arts magnet program, an extensive Advanced Placement program, and a strong academic and athletic reputation. Immense halls are lined with trophy cases filled with pictures of sports teams, where changing uniform styles reflect the long history of athletic tributes and triumphs over the course of the school's existence. Portions of the historic school are remodeled and several new buildings have been woven into the original structure. New science and technology laboratories, a theater, a gymnasium, and an updated library seamlessly modernize the original existing structure.

In general, the participants in all eight groups had positive comments about Pioneer High School. Students from all groups agreed that excellent teachers, a wide variety of course options, various academic support structures, and numerous opportunities for extracurricular activities were positive attributes of the school. Each participant talked about the caring and helpful teachers at Pioneer. Juanita (G7) captured the numerous positive comments made by all of the participants. She stated, "Overall I would say that [omitted school name] is a pretty awesome school. We have great teachers."

The five students in group 4 were particularly complimentary about the teachers and the courses offered at Pioneer High School. This confident group of students was focused on earning top grades in their advanced classes. Group 4 participants indicated that the regular—or not advanced—classes were too easy. The participants also conveyed that, even among advanced classes, some classes were held in higher regard than others. In other words, there existed a hierarchy of difficulty levels among honors and AP classes. Arnold (G4) explained, “...In some classes, the work load might be a little easier than in a harder AP class. It just depends on what course you are taking, whether it is science, geography, or math.” When asked about any recommendations for change in the AP program, students in group 4 focused mainly on issues surrounding the stress of their Advanced Placement courses final exams, rather than the Advanced Placement courses themselves.

Two Latino students in group 8, Gerardo (G8) and Angelina (G8), stated that they enjoyed school and the support of the teachers. They were soft-spoken, respectful, and proud of their work ethic. Gerardo claimed, “Teachers have been great! They are like a new pair of parents” (G8). In contrast to the White students in the comparable GPA group, neither Latino student gave the impression that they were the top students in the school. Instead, Gerardo and Angelina talked about how hard they worked to earn their good grades. Gándara and Contreras (2009) contended that Latino students were typically less confident in their reading, writing, and math abilities and rated themselves academically lower when compared to White students ratings in the same ability groupings.

Participants also talked about the numerous opportunities available at the school. Angelina (G8) claimed, “There are so many different things to do. You have clubs, sports, school work, and you meet a lot of nice people.” In particular, participants commented on the school’s magnet program, explaining that the magnet program attracts students who were interested in art, music, and dance. Juanita (G7) also complimented the school’s menu of extracurricular activities, but confessed that she did not typically participate. She claimed that she tried Marching Band but dropped out and then regretted not pursuing music in high school. An examination of participant school records indicated that five out of the eight White participants, as compared to none of the nine Latino participants, were involved in the school’s Arts Magnet Program.

Although all 17 participants shared positive comments about the school’s many opportunities, a concern about the lack of student engagement by some students at Pioneer High School was mentioned by all participants as a reason why some students either do not enroll in AP classes or enroll but perform poorly in AP classes.

When asked why some students either displayed a lack of interest in Advanced Placement course enrollment or do not do well in Advanced Placement classes, various reasons were suggested by participants. In particular, White participants complained about students in their AP courses who they believed did not belong. Baker (G4) and Natalie (G4) commented about students enrolled in their AP classes who exhibited little effort. Baker stated, “It’s usually the people that haven’t taken any AP classes and they just want to take one just because their friends are.” Arnold (G4), Baker, and Natalie explained that there are certain groups of students in their AP classes who sit together in

the back of class, talk during class, and do not do their homework or give any effort toward learning. Natalie further explained:

And they are the ones that don't care, they don't turn in work, and I'm like, why are you taking an AP class when you're not even going to try? It takes away from class. It distracts from the students who do care because the teacher is always on them for not turning in home work.

Natalie believed these underachieving students simply disengaged as soon as their

Advanced Placement course grades were low.

Latino participants agreed that there were struggling students at the school.

However, rather than focusing on negative student behaviors, Latino participants described support structures available to disengaged learners. Several Latino participants shared examples of interventions available at Pioneer that could support students requiring additional academic help. Laura (G6) explained:

I think interventions help too. It's for the kids that have D's or F's, mostly F's. They have to stay in 30 minutes of their lunch until they get their grades up. And I think it helps a lot of students.... This is also the time that you can go talk to your teachers and make up missing work or make up a test or exam anything that will make you get your grade up.

Laura felt that this type of intervention could open access for any student interested in enrolling in an AP class.

In addition to intervention time during lunch, Latino participants discussed other structures that could support struggling students. After school tutoring and organized programs like Upward Bound and Advancement Via Individual Determination (AVID) were mentioned as academic support options available to any student at the school. AVID and Upward Bound are college-access programs which encourage students to take more rigorous high school courses and motivate students to apply for and attend college.

Juanita (G7) claimed that she took advantage of the tutoring and stated, “I started coming in on study sessions. I think my success while taking the AP exam at the end of the year was because I had gone in for several days to review.” Juanita acknowledged that few students attended the tutoring opportunities. She explained, “I don’t think students take advantage of those study sessions personally because I’ve been there. I don’t see a lot of students [attending help sessions].... And I was embarrassed and I thought ‘I don’t need to go in there’ when I did need to go in there.”

In addition to problems with student engagement, two Latino students in Group 5 suggested that the school had a bullying problem. Anna (G5) and Alejandro (G5) claimed that, although many students are accepting, the bullying issue was serious and largely neglected by the teachers, counselors, and administrators. Anna complained that, “we have bullying issues here and the staff doesn’t want to take care of it as well as they should.” When commenting about adverse bullying conditions, Anna stated, “I don’t want to be at school anymore.” She also expressed concerns for her brother at Pioneer and stated the following:

It’s the same thing with my brother. He’s a freshman this year. I’m worried that he’s had a few kids pick on him in middle school and they usually end up going to his school and getting on those kids. I was picked on in middle school and it ruins you.

Alejandro confirmed Anna’s fear of intimidation at the school. He stated, “I hope the school gets better. I’m afraid for my cousins who will come here.”

None of the White students talked about bullying or personal issues that affected them at school. In contrast, all of the Latino students expressed some type of school stress or personal struggle experienced while enrolled at Pioneer High School. Nina (G7)

explained that she believed there were “some amazing teachers” at the school but confessed that she experienced personal struggles throughout high school.

As confirmed in the literature, students coming from families of poverty experience environmental and social issues that may impact their academic performance (Berliner, 2009). Table 3 displays the overall percentages of low income students at Pioneer High School, as compared to the proportion of Latino students for the past four years. Table 3 shows that the proportion of Latino students and the percentage of low income students at Pioneer High School are statistically similar and, over the past four years, have steadily increased at the same rate. Therefore, it can be inferred that many of the Latino students at the school come from families living in poverty.

Table 3

Percentage of Low Income Students and the Percentage of Latino Students by Year at Pioneer High School

	2009	2010	2011	2012
Percent of Low Income Students	55%	57%	57%	64%
Percent of Latino Students	52%	59%	60%	63%

Among the focus group participants, seven out of nine, or 78%, of the Latino students were considered high poverty as compared to one out of eight, or 13%, of the White students. Gándara and Contreras (2009) explained that schools serving large proportions of high poverty Latino students typically lack the resources to adequately support their needs and often perpetuate the social, medical, or psychological problems associated with disadvantaged students. The school stress and personal struggles

described by the Latino participants could potentially be explained by the adverse issues connected with their low income status.

Systemic Structures and Educational Practices

Critical qualitative research focuses on the organizational structures that determine who has access to programs and who is in charge of making decisions (Merriam, 2009). Each student group was asked questions about systemic structures and educational practices that they believed impacted enrollment in the Advanced Placement program at Pioneer High School. Student responses were initially analyzed through an open coding process. Next, an axial coding process was used to organize the data into core categories and to establish a connection between those categories and the current literature. After responses were grouped into categories, additional information from student transcripts, school records, researcher field notes, and researcher journal notes provided deeper insight into the specific issues that impacted Latino student access and equity to AP programs at Pioneer High School. Honors course enrollment, teacher recommendations, and the AP registration processes emerged as significant issues that will be reviewed. For some of the issues, White and Latino student responses revealed differences in honors course enrollments which may potentially impact Advanced Placement program experiences at the high school.

The Impact of Honors Course Enrollment

Student comments about their freshmen and sophomore course enrollment prompted further research into individual school transcripts to verify participants' statements about freshmen and sophomore course enrollments. Early enrollment in

honors and accelerated content courses and AP course registration procedures at Pioneer High School potentially played a crucial role in the participant's future AP enrollment.

School records revealed that the eight White students in groups 1 through 4 were enrolled in a total of 42 sections of honors classes during their freshman and sophomore years. In contrast, the nine Latino students in groups 5 through 8 were enrolled in only 23 sections of honors classes during their freshman and sophomore years. Therefore, White participants were enrolled in an average of 5.3 sections of honors classes during their first two years in high school as compared to an average of only 2.6 sections of honors classes per student for the participating Latino students.

Comparisons of the White and Latino AP and non-AP participants also revealed differing honors level course enrollments. Students in the non-AP groups show that White students in groups 1 and 2 averaged 0.7 sections of honors classes per student, and Latino students in groups 5 and 6 averaged higher at two sections of honors classes per student. In contrast, the White students in AP groups 3 and 4 averaged 6.7 sections of honors classes per student while the Latino students in groups 7 and 8 averaged only 3.3 sections of honors classes per student. Figure 6 displays the average number of honors courses taken by each group.

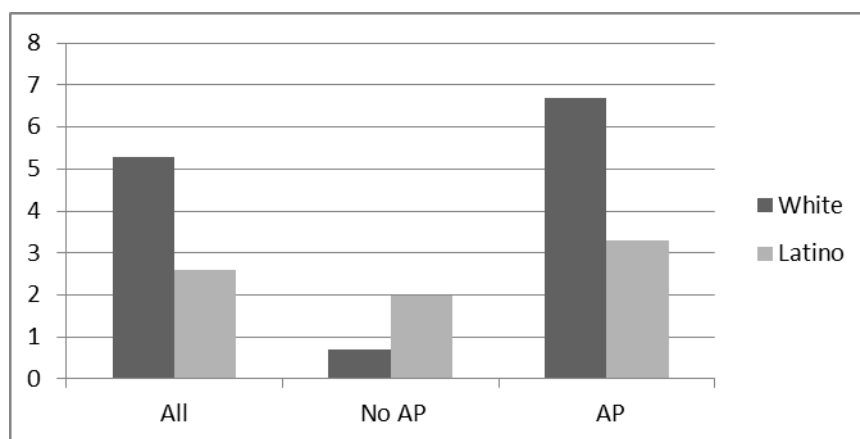


Figure 6. Comparison of honors enrollments by groups. Numbers represent the average number of honors and accelerated freshman and sophomore course enrollments for White and Latino students in participant groups. Data were obtained from 2012 school transcripts.

Figure 6 indicates that the honors level course enrollments averages 2.7 sections fewer of honors classes for the Latino participants in all groups as compared to White participants. For students in the AP groups, Latino participants experienced 3.4 fewer sections of honors and accelerated classes as compared to the White participants in the same groups. Research confirmed that some Latino students are not encouraged to enroll in honors classes (Saunders & Maloney, 2004). Significant differences in honors course enrollments for Latino and White students may indicate a systemic issue at Pioneer High School.

In addition, feelings of isolation among Latino students enrolled in honors classes could potentially lead to a lower enrollment rate. According to Saunders and Maloney (2004), minority students often felt isolated and alienated in honors classes because many of the other students in the honors class had attended school together since elementary

school. Several Latino participants discussed the challenges they experienced in honors classes.

For example, Laura (G6) was not enrolled in an honors class as a freshman but was enrolled in an honors class at the beginning of her sophomore year. She said that she immediately felt behind in the class and ended up dropping the course. Laura explained her feelings of inadequacies in the honors course:

I started in my sophomore year and everyone already knew each other and they had already started something from the summer. And they were like take out this and take out that and I as like—what are you guys talking about? And they would use big vocabulary that I didn't understand. And they wouldn't even ask if I understand it because they all did but me. So I felt out of place.

When asked if she would have preferred to take the honors class, Laura stated “I would have had more experience instead of just jumping in and having no idea what they were doing.” Although Laura was in the higher GPA group, her school records indicated little rigor in her course selections. School records indicated that she enrolled in AP Spanish her senior year.

Another Latino student in that same non-AP group, Mariana (G6), confirmed the challenges involved in taking sophomore Honors English without a freshman Honors English course. However, she shared a slightly different experience from Laura (G6).

Mariana explained:

I knew most of the people in it [the honors class]. But, like most of the stuff they were talking about, they were using big words too and I didn't understand. But the teacher would explain the smaller words. But when it came to the bigger words, she thought we knew it. So I was not the only one who thought it was hard because half the time we did not understand what she was saying. But we got through the class anyways.

Mariana completed the sophomore Honors English class earning a B semester I and a C semester II. She was also accelerated in math during both her freshman and sophomore years. School records indicated that Mariana enrolled in AP Statistics in her senior year.

Transcripts revealed that grades in freshman and sophomore honors classes also varied by participant groups. The largest difference is shown in the percent of students earning an A for an honors class in the AP group. Sixty-one percent of the White students in the AP groups earned an A in an honors class as compared to only 14 % of the Latino students in a comparative group. Honors level course grade distributions for the White and Latino students in the AP groups are shown in figure 7. The graph in figure 7 indicates that Latino student participants enrolled in honors level courses at Pioneer High School earned fewer As and significantly more Cs or lower as compared to White student participants.

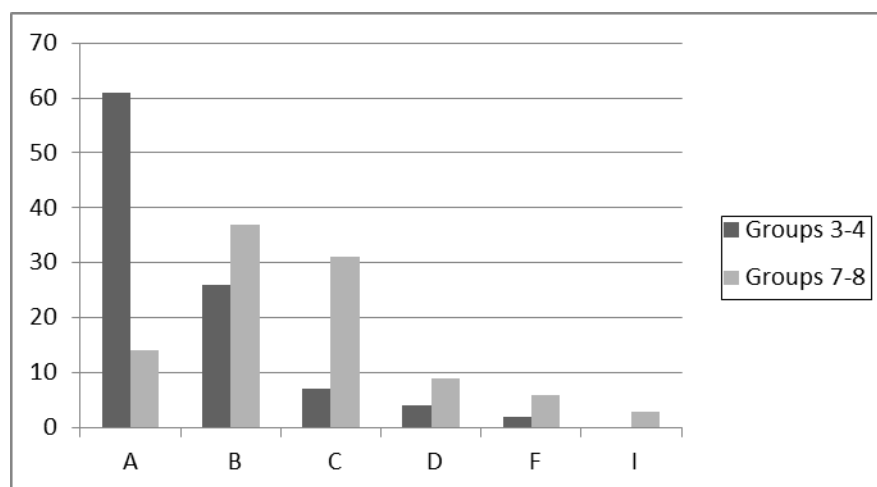


Figure 7. Grade distributions of honors and accelerated courses. Numbers compare the percent of grades earned in honor level classes for White and Latino participants in AP groups. Data were obtained from 2012 school transcripts.

Despite discrepancies in honors enrollments and grades earned in honors level and accelerated courses during their freshman and sophomore years, both the White and Latino participants in the AP groups averaged the same number of Advanced Placement course enrollments. Participants across all AP groups averaged two AP course enrollments per student during their junior year. However, school records revealed that grades earned in those Advanced Placement classes indicated a difference in academic performance between the Latino and White students. White students earned 14 A's and B's in AP semester grades, as compared to eight A's and B's earned by Latino students.

In addition to lower grades in AP classes, Latino students were also enrolled in fewer classes during their junior year, as compared to White students. The average number of course enrollments for White participants was 13, as compared to an average of 10 course enrollments for Latino participants. Even though Latino participants averaged fewer course enrollments during their junior year, they also failed more classes. Latino participants earned nine Fs while White participants earned two.

During the first semester of their senior year, both White and Latino participants averaged six classes per student. Figure 8 displays the grades earned in those classes. The graph in figure 8 shows that first semester grades earned by participants' classes differed between groups. In particular, eight White participants earned 33 As, as compared to only 19 As for the nine Latino participants.

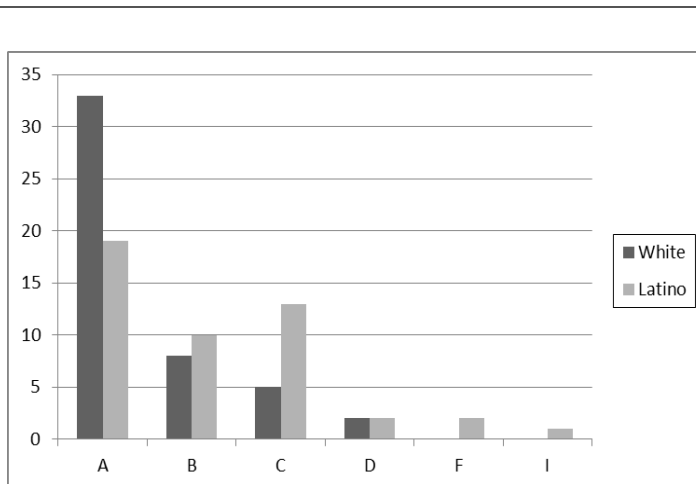


Figure 8: Participant grades in semester I courses during senior year. The graph compares the number of grades by White and Latino participants during the first semester of their senior year. Data were obtained from 2013 school transcripts.

Of note, school records at Pioneer High School were examined to determine the current year's Advanced Placement enrollments for the 17 focus group participants. For the 2012-2013 school year, Advanced Placement enrollments for the White participants show more average enrollments per student as compared to the Latino participants. Of the eight White participants, only one student is not enrolled in an Advanced Placement course for the 2012-2013 school year. The seven remaining White students are currently enrolled in 17 AP classes. This equates to an average of 2.4 AP classes per White student, which is slightly higher than the average of two AP classes for the previous year. Of the nine Latino participants, two are currently not enrolled in any Advanced Placement courses, and the seven remaining students are enrolled in 9 AP classes. This average of 1.3 AP classes per student is one class per student lower than the White participants and also lower than the previous year's average of two classes per student.

Records indicated that Latino participants experienced fewer opportunities to enroll in the honors courses that could potentially prepare them for the rigorous AP

curriculum. Participant transcripts indicated that, overall, White participants earned higher grades in regular, honors, and AP classes as compared the Latino participants. In determining reasons for the differing academic outcomes for Latino and White participants, students discussed the people that influenced their academic decisions. The role that teachers, counselors, family, and peers played in their academic decisions will be reviewed next.

Influential People in Advanced Placement Course Enrollment

Data from the participants' responses revealed people, both internal and external to the school, that were influential in Latino Advanced Placement program enrollments. A teacher's recommendation into the AP program seemed to be an important factor in whether or not a student enrolled in an AP course. In general, White Advanced Placement participants claimed they were asked by teachers to participate in the program, while Latino Advanced Placement participants typically made individual decisions about AP enrollment and were not often recruited by teachers for Advanced Placement enrollment. In contrast, participants indicated that counselors did not influence their course enrollment decisions. Participants shared that a course recommendation from a peer was influential in enrollments. Differences in how the parents and siblings of Latino and White participants influenced decisions will be discussed.

Internal influences. White participants from groups 3 and 4 currently enrolled in Advanced Placement courses claimed that their enrollment was influenced by teachers. They explained that individual students with academic potential were encouraged to enroll in AP classes. Patsy (G4) stated "I think that teachers in general encourage students they think would do well in AP classes because they do so well in regular classes

and they need a little extra challenge.” In sharing about the enrollment process, Mitch (G3) explained:

They [teachers] told me that I have a lot of potential and that I should try these courses. I started out on the honors program and I wasn’t thinking about taking AP and then last year, my sophomore year, I took my first AP class and I was the one out of three sophomores to take an AP class.

Similar statements from White Advanced Placement participants showed that teacher recommendations represented a key component in their AP program enrollment.

Latino participants in the Advanced Placement program portrayed a different view of Advanced Placement recruitment. One Latino student in the AP group, Juanita (G7), believed that AP teachers typically recommend students for program enrollment but suggested self-advocacy as another way to enroll in AP. She stated, “I did not have a lot of teachers recommending AP classes. People should look into it themselves as well.” When asked how it felt to not be recommended for an AP class, Juanita stated, “I was kind of discouraged. I felt like if I could get noticed, teachers would notice me and recommend me for AP class but that wasn’t the case. And it’s discouraging to know that your peers have more successes.”

Another Latino AP student, Nina (G7), shared that her AP enrollment was also due to her personal determination. She stated, “I chose it [AP enrollment] for myself. I talked about it with AP students but it wasn’t really recommended to me personally.” When asked how students at the school might gain access to AP enrollment, Nina explained:

I really don’t know. Maybe the student could become more aware. I really didn’t know what an AP class was. I didn’t know what the difference was between a regular class and an AP class. I think it would help if there was more definition by the counselor or [the Advanced Placement course was] recommended.

Latino students in group 8 suggested that AP teachers should be more impartial in recruiting AP students and should make a concerted effort to appeal to a variety of students. Gerardo (G8) stated, “I just wanted to challenge myself, that’s the only reason why I took those classes. Nobody encouraged me.”

White and Latino students not enrolled an AP class also discussed the role of teachers in their academic course selections. One Latino non-AP student claimed that some AP teachers discouraged enrollment by talking about how challenging the work is in an AP class. Anna (G5) claimed, “I’ve talked to the teachers that have taught the classes and do teach the classes. They think that I can’t do it.”

Similarly, Ricky (G6) was interested in enrolling in AP Calculus but a teacher encouraged him to take a non-AP class that was easier and had a slower pace. He shared that the teacher stated, “There wasn’t going to be enough time to sit down and explain.” After that, Ricky decided not to enroll in the AP class and elected to take the easier course recommended by the teacher. The one non-AP White participant with a low GPA indicated that her teachers never asked her to consider enrollment in an AP course. Jodie (G1) stated, “I don’t know what AP class there is [*sic*]....They [teachers at the school] really haven’t discussed AP classes with me and I’m not even sure if my parents know what AP is.” In contrast, Cullen, a high GPA non-AP White student, indicated that he was recruited into the AP program but elected not to enroll.

All three non-AP Latino students in group 6 believed that a teacher recommendation was a requirement for enrollment in an Advanced Placement course. Ricky (G6) claimed, “The teacher can choose to put you there [in AP]. But if you want to, you have to talk to the teacher and the teacher decides if you can make it.”

Commenting on the influence of teacher recommendations into the Advanced Placement program, Nina (G7) stated, “Not to point fingers, but the teachers should not decide on feelings who is capable I guess. Just don’t look at the GPA or extracurricular things but the students that have potential.”

Jodie (G1), a White participant with a low GPA not enrolled in Advanced Placement courses, claimed little knowledge about the program. All seven other White student participants indicated that they were asked to enroll in an AP course. In contrast, Latino participants were not typically recruited for AP enrollment. However, one Latino student from group 6 claimed that she was encouraged to enroll in AP Spanish because she was bilingual. Laura (G6) stated, “My other teacher encouraged me to take AP Spanish since I’m Mexican.” Her teacher explained that she would have increased fluency in Spanish after taking the AP Spanish class and that would help her get a job after she graduated from high school.

The influence of teachers in Advanced Placement enrollment included actions beyond teacher recommendations. Several White AP student participants claimed that AP teachers purposefully assigned difficult assignments at the beginning of the course to encourage students that they believed lacked potential to drop the course. White students in group 4 talked about students who abandoned the AP course after only one assignment because of the amount of work. Arnold (G4) stated, “I knew a few students that actually dropped my [Advanced Placement] class in the beginning because, after one homework assignment. They were like; this is way too much homework for one day.” Angelina (G8) also believed that some AP teachers intentionally restricted their AP class enrollment to maintain smaller class sizes.

Complimentary statements about teachers at Pioneer High School were mentioned across all participant groups. Yet, further discussion among participants revealed potential concerns about how teachers at the high school equitably support all students. Conflicting statements seemed to indicate that teachers were emotionally supportive but may not believe that all students were capable of rigorous academic work. Gándara and Contreras (2009) found that some teachers' personal assumptions about the marginalized status of ethnic minorities caused them to compliment and reassure Latino students in an effort to provide a nurturing climate rather than provide a rigorous academic environment.

Unlike teachers, who were considered by the students to be important in AP recruitment, participants believed that counselors had little, or no, positive impact on their AP enrollment. When asked about the role counselors played in course selection, participants stated that counselors mainly provided basic course registration and some career information. In one case, a counselor discouraged a student from AP enrollment because of the difficulty level of the AP course and the possibility of the student failing to earn course credit for graduation.

In responding about the role of the counselor in their course selection, nine out of 10 Advanced Placement student participants claimed that counselors did not influence their decision to enroll in AP classes. Mitch (G3) explained, "I think they [counselors] are there to register.... If you have questions about a class, you need to talk to the teacher." One AP student from group 4 indicated that a school counselor was helpful in her decision to register for an AP class but she also said her sister's influence was equally important. Seven non-AP students responded in a similar manner. Alejandro (G5)

acknowledged that the counselor was more concerned about the credits he earned from easier classes that were needed for graduation, rather than him taking challenging courses. Anna (G5) claimed that teachers are a better resource than counselors when it came to academic choices. She stated, “When—like you need help with something—you don’t want to see a counselor. You can go see a teacher about what’s going on.”

Differing student perceptions about Advanced Placement program recommendations from teachers, and a potential lack of knowledge about the AP program among some students at Pioneer High School exposed concerns and inconsistencies in the school’s systemic structures. How the school recruits Advanced Placement students and provides information about the Advanced Placement program could potentially negatively impact Latino student enrollment. Further information about the external influences of family and peers in course enrollments helps to clarify how students make registration decisions.

External influences. Focus group questions about people other than school staff that were influential in AP enrollment prompted conversations about the role of family and friends in the participants’ academic decisions. Participant responses indicated that family and peers played varying roles in the AP enrollments at Pioneer High School.

shows the number of participants who indicated a friend, parent, or sibling was influential in their academic decisions. Table 4 indicates that participants in the Advanced Placement program claimed that their parents had significantly higher influence in academic decisions when compared to the non-AP participants. Among the eight AP students, 80% stated that parents were influential in their academic decisions.

On the other hand, only 14% of the seven non-AP students believed that parents influenced academic decisions.

Table 4

Number of Participants Indicating Academic Influence from Friends or Family Members

	Peers	Parents	Siblings
Student Groups			
AP	10/10	8/10	1/10
Non-AP	1/7	1/7	2/7
Latino	5/9	3/9	2/9
White	6/8	6/8	1/8

Table 4 also indicates that 33% of the Latino responses claimed that their parents were influential in academic decisions as compared to 75% of the White responses.

Although three of the Latino students indicated their parents were influential in academic decisions, the responses revealed that parents were generally unaware of the Advanced Placement program. Mariana (G6) shared that, although her parents encouraged high grades and recommended enrollment in courses necessary to be successful in college, they were unaware of the AP program. She stated, “I don’t think they really know what AP means. They just know it’s more advanced and so is honors.”

Even with the discrepancies between White and Latino participants in the role that parents played in their academic choices, overall parent unfamiliarity with the school’s Advanced Placement program was a consistent theme that resonated throughout all participant groups. Baker (G4) claimed, “They [parents] really don’t know what AP

classes are. It wasn't around when they went to school. All they know is that it's a higher level class based on intelligence." When asked about her parent's influence in AP enrollment, Nina (G7) stated, "It was up to me. My parents know about as much about AP classes as I did last year. They were not really aware."

Non-AP White students in groups 1 and 2 confessed that their parents discouraged AP enrollment because they were concerned about the difficulty level. Jodie (G1) explained that her parents simply want her "to make it through high school," and they would probably not suggest taking an AP class. Calvin (G2) also claimed that he considered enrolling in several different AP classes during his senior year, but his parents asked him to reconsider. They were afraid that the AP classes would be too difficult, and that his GPA would be negatively affected. In clarifying his parents' concern, Calvin explained, "My parents have always been very willing to help me and always cared about my grades."

Table 4 data also confirmed that friends played a significant role in the academic success of the participants enrolled in the Advanced Placement program. Peer help in completing assignments and studying for exams was generally considered by participants to be an important factor in academic success. Mitch (G3) explained, "When one of us is down the others won't leave you behind. They [friends] also encourage you. We all want to help each other pass." In particular, Latino AP students talked about the importance of peer support and studying with friends. Juanita (G7) stated, "We always talk to each other about tests and needing to study.... We are ambitious and really want to succeed in these classes."

While academic help from peers emerged as a positive support structure, using peers to make academic decisions resulted in lowered academic attainment for a few of the participants. One non-AP Latino student talked about how she selected “slower” courses, mainly cooking and computer classes, for her senior year. Mariana (G6) explained, “And when we [friends] picked classes, we would pick the ones we want to take and sometimes we would take some together.... I would suggest that they would take this class with me so I’m not lonely in there.” In that same focus group, Ricky (G6) agreed that he and his friends tend to take easier classes when picking classes to take together. He confessed, “All my friends are either lazy or just they don’t like pushing themselves.”

In addition to concerns about taking easier classes with friends, negative comments from peers about AP classes could potentially have an adverse effect on AP enrollments. One non-AP Latino student confessed that some of her friends complained about the work in the AP class. Mariana (G6) stated, “Some of my friends do take AP classes and they would talk about it. Most of the time I’d just listen to them complain about how much homework they’d get each time.” Another non-AP Latino student admitted that most of his friends do not take AP classes but he remembered speaking with a peer who was struggling in an AP class. Anna (G5) recalled, “For my friend, it was really hard for her to keep her grade up from failing. And she is one of the smartest girls I know.”

In only a few cases, older siblings were mentioned by participants as influential in high school academic decisions. For example, if an older sibling was successful in an AP class, they influenced the enrollment of younger brothers and sisters. Juanita (G7)

explained, “I think just my own ambition and seeing my older sister just go for it and live her life drove me to take harder classes and try harder in school.” However, the success of an older sibling could possibly result in the opposite effect. As earlier documented, several participants indicated that academic competition with an older sibling could actually negatively impact AP enrollment.

Teachers emerged as the most impactful people in Advanced Placement enrollment. Dissimilar early experiences between White and Latino participants in honors enrollments and AP program recommendations indicated that teacher perceptions about student eligibility for the pathway to Advanced Placement at Pioneer High School may negatively impact Latino student honors course enrollments and AP enrollments. Parents were also important in White and AP participant’s academic choices. Among the majority of the participants, school counselors had little influence on their academic choices while peers had varying degrees of positive and negative effects. In addition to influential people, participant’s academic experiences which impact AP enrollment emerged from focus group interviews and will be reviewed in the following section.

Academic Experiences

The mention of the words “honors” or “advanced” brought about differing responses from White and Latino participants. Inconsistencies in how the word “rigor” was interpreted also explained opposing perspectives between participant groups. Furthermore, questions regarding reasons why students participate or fail to participate in the AP program resulted in discussions about college enrollment and fears surrounding the AP courses.

Rigor of Advanced Placement

Perceived additional work load in the Advanced Placement courses emerged as a potential reason why students may elect not to enroll in an Advanced Placement course. Arnold (G4) stated, “The teacher would assign you a lot of papers. You had to write in full detail about each chapter you were reading. And it was a lot of work and a lot of questions and testing all the time.” Another White student from group 4 confirmed the negative perceptions about the additional time needed in AP classes to complete assignments. Patsy (G4) explained, “I think they might fear the work load. That it [the additional work] might be too much for them to handle.”

While White students in all groups claimed that the amount of additional work necessary to be successful in an Advanced Placement course potentially inhibited students from enrolling, Latino students focused more on the potential difficulty level of Advanced Placement courses as a possible reason why students choose not to enroll. Latino participants also claimed that some students may not enroll in Advanced Placement courses because of the curriculum’s pace. When asked if there was a difference between AP courses and regular courses, Angelina (G8) claimed, “Yes, there is a major difference. You can tell. For example, we cover the material much faster and we go in depth more.” Among Latino students in general, there was a fear of not being able to understand the information presented in an AP lesson. They also believed in the likelihood that AP teachers would not be able to slow down the pace or to take the time to help with questions.

The quality of work necessary to earn good grades in an AP class also emerged as a potential barrier to AP enrollment. Natalie (G4) claimed, “Something that also is

challenging is the quality of work because it's supposed to be a college class. Your quality has to be high, your teachers expect it. So it is harder to keep your grade up.”

Another White participant commented on the fact that the difficulty level in an AP class was what encouraged some students to enroll but also discouraged others. Arnold (G4) further explained that the rigor was a benefit because only motivated students typically enrolled, but that same rigor also scared some students away. Other group 4 participants expanded on the fact that AP is not meant for everyone. They stated that AP is for those students wanting a rigorous academic experience in order to prepare for college.

Natalie (G4) claimed, “I felt like the classes that weren’t AP would be too easy for me and I wanted to challenge myself. We are not suggesting to make it [Advanced Placement course work] easier. We are taking a college course and college isn’t easy.” Confirming the importance of keeping the AP courses rigorous, Arnold (G4) stated, “If anything make it [Advanced Placement course work] harder. Not like incredibly harder but rigor at a good level.”

Latino participants had dissimilar answers with White students when they were asked about the challenges that students may face in an AP class. Among Latino responses, studying, turning in home work, and paying attention in class arose as important attributes necessary to be successful in an AP class. Gerardo (G8) explained, “Study like no other. This is the main key to AP. If you don’t study, you’re lost. Pull some all-nighters.” In comparison, White participants explained that, while there may be a perception that AP classes require extra study time, overall the homework is manageable. Arnold (G4) claimed, “It’s [homework] a lot easier to manage than most people think. People make it sound a lot worse.”

Learning study skills was also identified by several Latino participants as a key component for success in AP classes. Nina (G7) explained “I think the hardest thing was getting myself to study and getting myself to look back on what we had done and reviewing.” Juanita (G7) confirmed that her work ethic made a difference in the AP class. She stated “You have to develop study skills. My grades were dropping in class and I realized I wasn’t studying. I talked to my teacher and we adjusted some things.”

In reviewing comments about the rigor of Advanced Placement courses from both White and Latino participants, subtle differences between the two groups were apparent. Latino students discussed the difficulty level in AP courses and the importance of learning how to study. In contrast, White students emphasized the importance of maintaining high levels of quantity and quality of work in the AP program to help prepare college-bound students for the rigors of college classes. The next section will disclose what participants shared about the connection between the Advanced Placement program and college success.

College Preparation and College Admittance

Enrollment in the Advanced Placement program as preparation for attending college was discussed as important by about half of the participants overall. Eighty-three percent of White participants in the AP focus groups indicated that they enrolled in AP courses to help them with college readiness as compared to 50% of the AP Latino participants. In addition, 40% of the Latino participants in the non-AP group also cited a connection between AP enrollment and preparing for college.

However, when asked if Pioneer High School promoted Advanced Placement courses as a way to prepare for college, 50% of the participants indicated that was

typically not the case. Juanita (G7) stated, “I’m not sure if it [Advanced Placement program] is advertised. I think also that teachers that teach AP classes should tell students that this is great for college and for getting yourself ready.”

Other students believed that the connection between college readiness and the Advanced Placement program was probably not something that impacted AP enrollment. When asked if they believed college preparation motivated high school students to enroll in the AP program, Arnold (G4) answered, “No because people usually don’t address these classes in that way.” Natalie (G4) further explained, “They would have to be pretty motivated just to take it [Advanced Placement classes] to do better in college.”

Rather than college readiness, some participants commented more often on the connection between the Advanced Placement program and college admittance. Juanita (G7) acknowledged:

What got me into AP classes was the challenge and how I can succeed and colleges can see that. I would just suggest promoting the AP classes by letting students know it [*sic*] can help you get into college. I’m pretty sure the credit I got for the [AP] exam will get me somewhere—like a psychology or sociology major.

The previous comments connecting AP program enrollment and college readiness or college admittance were among the few made by the participants. Instead, statements about the fears associated with Advanced Placement enrollments were typically addressed.

Fears

When asked about why some students do not enroll in AP classes, Patsy (G4) responded, “I think that my friends that don’t take AP classes... have heard about things that we do in AP class that are specifically challenging and it scares them.” Some of

those challenges discussed by participants included the fear of failing the course and fear of failing the AP exam.

Fear of failure. In particular, students not enrolled in Advanced Placement classes talked about the fear of failure associated with AP courses. Calvin (G2) explained that, “there is a fear that the classes are too hard and of not being able to pass.” He further shared that earning good grades in courses was more important than enrolling in rigorous courses. Calvin confessed:

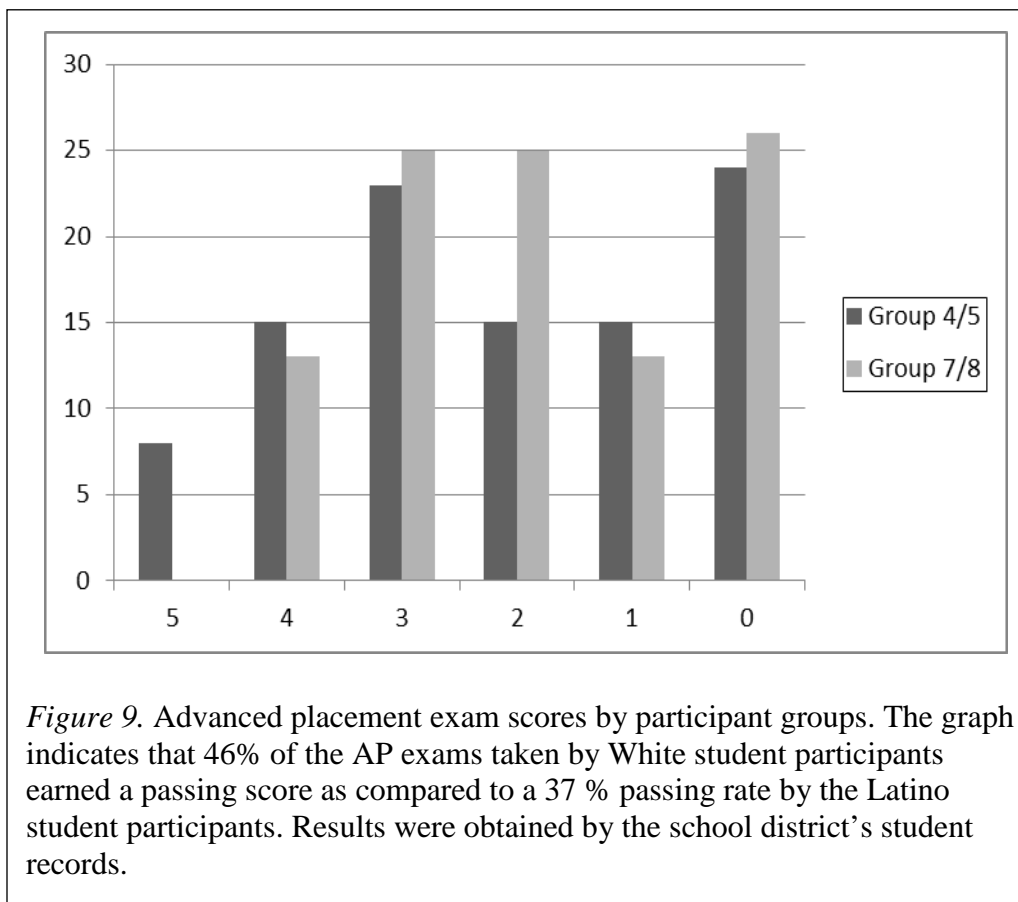
I tend to have a lack of effort in my classes and just kind of do the bare minimum to get by. I just want to get my credits out of the way without more work than I have to do. I kind of tend to take the bare minimum.... I never thought very highly of myself when it comes to school. People around me are always doing better than me.... Why should I keep working hard when someone else around me is always going to be doing better? My brother always did well in school but I don't want to be a copy of him.

Concerns about the difficulty level in courses were common among the low GPA participant groups. Some participants experienced fears of not being as smart enough to be successful in rigorous courses.

Potential low self-perception resonated throughout all participant groups as a possible reason why some students may not enroll in rigorous courses. Baker (G4), Natalie (G4), Patsy (G4), Angelina (G8), and Gerardo (G8), all AP students themselves, believed that some students fear they are not smart enough to pass an AP class and that some students are intimidated by other smarter students. Gerardo supposed that simply the name of the program discouraged enrollment. He stated that simply the name “Advancement Placement” was intimidating and potentially suggested to students that they must be considered advanced to be eligible for enrollment.

Fear of the AP exam. While Latino students focused on fears of failing rigorous courses, White students in group 4 discussed the fears associated with the end of course AP exams. Baker (G4) shared, “Some students aren’t willing to do all of that [work] for one test at the end because they might get a one or a two on it and not get any college credit at all.” AP exams were given in May of 2012. Scores earned on the AP exams ranged from 1 to 5, 5 being the highest. An AP exam score of 3, 4, or 5 is considered passing. According to AP teachers at Pioneer High School, AP students are highly encouraged to take the AP exam. However, AP students are not required to take the exam.

Figure 9 displays the percentage of Advanced Placement exam scores in each scoring level for the students participating in the research focus groups. The graph in figure 9 indicates that the passing rates for AP exams were lower among the Latino research participants. Passing rates for the entire school, which are displayed in table 5, confirms that Latino students score lower on the AP exams when compared to White students.



Overall, Advanced Placement score passing rates at Pioneer High School have varied over the past four years. Table 5 shows the overall AP exam passing rates at Pioneer, the passing rate of White and Latino students at Pioneer, and the overall passing rates of all students in Colorado taking AP exams. Although passing rates for Latino students at Pioneer High School have steadily increased in the past four years, passing rates for Latino students at the school still fall below the passing rates for White students. In addition, overall passing rates for the school are consistently lower than the passing rate for the state. Statements from focus group participants indicated that extra study sessions in preparation for the AP exams were helpful. However, not all participants specified that they attended those sessions.

Table 5

Percent of Passing AP Scores for Various Student Groups at Pioneer High School

	2009	2010	2011	2012
Overall	52%	54%	49%	58%
Latino	25%	28%	37%	41%
White	69%	65%	65%	64%
Colorado	63%	61%	62%	61%

Participants shared the importance of the teacher support they received for Advanced Placement exam preparation. Five of the six White AP participants commented on the importance of after school AP exam study sessions that they attended in preparation for the AP exam. Mitch (G3), Arnold (G4), Natalie (G4), Patsy (G4), and Pauline (G4) discussed the additional academic support they received in these extra study sessions that were organized by AP teachers. Natalie shared an example of a typical AP study session:

They [AP teachers] are so willing to go the extra mile. My AP Psychology teacher, he met the students outside of school to have a study session. We met at Old Chicago and we had a bunch of practice tests and he'd grade it and you could always re-do it to make sure we would get better. And all the practice he gave us was, like what really helped me the most.

Mitch (G3) also shared the importance of AP study sessions at local restaurants provided by AP teachers. He described, "We have study sessions at night that the teachers would set up. For history class we would meet at Village Inn, I Hop, or Chilies. The teacher would have games and would quiz us." Patsy further explained that working with her peers in these study sessions was also beneficial.

When Latino participants were asked about any extra academic support they received, they were equally complimentary of the help provided by the teachers at the high school. However, none of the Latino AP and non-AP students mentioned the AP study sessions at local restaurants. Instead, they talked about the support they received from AP teachers during the school day. Laura (G6) talked about receiving help at lunch. Mariana (G6) and Ricky (G6) both talked about the importance of having an open block of time during the day to get work completed and receive help from any available teacher. Laura described the importance of having an open block during the school day. She explained, “It leaves you extra time to rest when you get home, especially when you have to get up so early.”

Some students at the school may not be able to attend extra study sessions held outside the school day. School begins at 7:30 in the morning at Pioneer High School and students without access to a car either walk to school or depend on district transportation. According to the district’s transportation department, some students must be at their bus stop as early as 6:15 in the morning to arrive at school on time.

District records indicate that 35% of the students enrolled at Pioneer High School are eligible for bus transportation. For many of these students, the bus is their only option for transportation to and from school. Therefore, transportation to study sessions before school, after school, or in the evening is typically not available.

Of note, AP exams fees are \$87.00 per exam. Advanced Placement students eligible for the free and reduced lunch program at the school also qualify for free AP exams through a state funded grant program called the ESCAPE Grant. Two non-AP Latino participants mentioned the fees associated with AP exams. Alejandro (G5)

indicated that the cost of the exam could be a barrier for some students. Ricky (G6) also talked about the costs, but believed that the expense was not an issue. He explained, “For AP you have to pay for it but it’s not as much as college. It’s kinda [*sic*] like a freebee. You get a college credit without paying as much of a college fee.”

Conclusion

Focus group participants discussed specific systemic structures and student experiences that could potentially impact Latino enrollment at Pioneer High School. Although participants collectively expressed positive statements about attending the school, issues materialized from the students’ statements that could explain the low enrollments of Latino students in AP classes.

How teachers recruit and enroll students in AP classes arose as significant issues that could negatively impact Latino AP enrollments. Latino participants generally believed that teacher recommendations were required for AP enrollment, and few of the Latino participants received those teacher recommendations. In contrast, White students in the AP program stated that they were recruited and encouraged by teachers to enroll.

School records confirmed substantial differences between White and Latino participants’ early honors level enrollments. Latino participants experienced significantly fewer enrollments in honors courses when compared to White participants. A lack of early enrollments in rigorous courses which may prepare students for Advanced Placement courses could explain the discrepancies in AP enrollment proportions, AP course grades, and AP exam performance experienced by Latino students at the high school.

Although all research participants agreed that there were disengaged students at Pioneer High School, differing views between White and Latino students offered unique perspectives regarding these disengaged learners. White participants typically focused on struggling students in their AP classes and were worried that these unwilling learners might negatively impact the learning environment in the AP class. Latino participants generally focused on potential support structures for struggling students.

Specific concerns about possible misguided teacher perceptions, inadequate social emotional support, and personal fears surrounding certain aspects of the Advanced Placement program emerged as participants discussed their high school academic experiences. An extensive lack of general information about the access to and benefits of the AP program could be compounding the overall fears associated with enrollment. In the following chapter, the conclusions of this study are reviewed and subsequent recommendations to increase Latino participation in Advanced Placement programs are discussed.

CHAPTER V

REFLECTIONS, VIEWS, LIMITATIONS, AND RECOMMENDATIONS

Focus group transcripts, researcher notes, and student records were analyzed in this comparative case study to generate a theory grounded in the data for the purpose of explaining how Latino students from one Colorado high school experienced the access to and equity in Advanced Placement (AP) coursework. Through the use of focus group inquiry, responses from Latino students involved in various academic pathways at Pioneer High School helped to construct insight into the academic pathways experienced by Latino students. Data from school records and researcher notes were also used to make meaning of the focus group transcripts. A constructive perspective allowed the researcher to interpret the complex and varied data encountered in this case study.

A critical theorist's approach was used in this qualitative study to raise awareness of systemic academic barriers experienced by Latino high school students. Informing educational leaders about these systemic barriers could prompt changes in practices and policies that inhibit Latino enrollments in Advanced Placement courses. Crotty (1998) explained "Critical forms of research call current ideology into question, and initiate action, in the cause of social justice" (p. 157). A final review of the research findings and subsequent recommendations will support positive action toward the equitable education of Latino youth. This chapter contains the following five sections:

1. an in-depth look into the findings,
2. personal reflections of the researcher about the meaning of the data,
3. personal views compared or contrasted with the literature,
4. limitations of the study, and
5. suggestions for future research.

An In-depth Look into the Findings

The triangulated data sources were used to interpret the following questions considered for this study:

- Q1 What are the Latino students' perceptions of the systemic structures and educational practices within Pioneer High School that support access to and equity in Advanced Placement programs for Latino students?
- Q2 What types of Advanced Placement program experiences do Latino students have at Pioneer High School as compared to White students?

From the voices of the students and school records, common knowledge about the purpose and benefits of the Advanced Placement program, ability tracking and Advanced Placement program preparation, teacher beliefs and Advanced Placement enrollment policies, and study session and support opportunities emerged as major findings within the systemic structures and educational practices at Pioneer High School that impacted access to and equity in Latino student AP enrollment. Within each of those structures and practices, differences in Latino student AP program experiences as compared to White students will be reviewed.

Common Knowledge about the Purpose and Benefits of the Advanced Placement Program

A general lack of an overall common understanding among participants about the benefits of Advanced Placement program enrollment emerged from the student focus groups. Although Latino and White participants discussed some personal benefits, including earning higher high school grade point averages (GPAs) and receiving college credits, the students did not specify that AP program enrollment was associated higher postsecondary admittance, enhanced college financial options, and financial success as adults (Bleske-Recheck, Lubinski, & Benndow, 2002; Kyburg et al., 2007; Riegle-Crumb, 2010; Robinson, 2003; Santoli, 2002; Solorzano & Ornelas, 2004). When participants were asked about the reasons why students enrolled in the Advanced Placement program, the variation in responses indicated the need for a concerted effort by school leaders to inform all students enrolled at Pioneer High School and their parents about the numerous opportunities available through AP program enrollment.

The majority of the White participants stated that college-bound students seeking higher GPAs and more challenging courses tend to enroll in the Advanced Placement program. They also indicated that earning college credits by passing the AP exam was a reason to take an Advanced Placement course. In contrast, fewer than half of the Latino participants discussed college as a reason for taking AP courses. None of the participants discussed the connection between AP enrollment and college attainment.

Participant responses displayed in table 4 (in Chapter 4) also indicated that, among the non-AP and Latino groups, parents were not generally considered influential in academic course decisions. In contrast, White students indicated that parents were

influential in their academic decisions. Across all groups, peers were more influential than parents in course enrollment decisions. Since participant responses about the benefits of Advanced Placement course enrollment varied, information about the Advanced Placement program obtained by peers may not be accurate or complete. Since much of the information about AP programs comes from peers, uninformed parents and erroneous information from other students could perpetuate inaccurate perceptions about Advanced Placement courses, and negatively impact enrollment for Latino students.

Concerns about the difficulty level in an Advanced Placement course, failing the Advanced Placement course, or not being smart enough were perceptions discussed by Latino participants. In addition, fears of failing the AP exam were common among all groups, but particularly among the White participants. However, table 5 (in Chapter 4) indicated that Latino AP students at the school scored significantly lower than White AP students. Despite the concerns and fears surrounding AP course enrollments, none of the students discussed or claimed to understand the impact that Advanced Placement program enrollment had towards college attainment.

Studies have shown that exposure to the rigorous academic curriculum inherent in the Advanced Placement courses is beneficial to students regardless of the course grades or scores earned on the exams. Mattern, Shaw, and Xiong (2009) determined that students who took an AP exam but scored a one or two typically attended more discerning college institutions, enrolled in more rigorous college courses, and had higher college attainment levels when compared to the non-AP group. In addition, college students who enrolled in high school Advanced Placement courses earned more course credits during their first year of college and consistently earned higher GPAs in the

college subject area related to the AP course taken as compared to students who did not take high school Advanced Placement courses (Mattern, Shaw, & Xiong, 2009).

Hargrove, Godin, and Dod (2008) conducted an extensive study of AP and non-AP high students who attended public 4-year institutions in Texas. Data from the study concluded that, regardless of their Advanced Placement exam test scores, college students who took both an AP course and the AP exam while in high school academically outperformed the group of college students who took no high school AP courses or AP exams. Table 6 displays the college attainment rates for AP students, non-AP students, and students enrolled in dual credit courses.

Table 6

Four Year College Attainment Rates Varied by AP Test Performance or Dual Credit Experience

Test Performance or Dual Credit Experience	Percent Earning Bachelor's Degree
Neither AP nor Dual Enrollment	11%
AP Course and Exam with Average Exam Score of 1	21%
Dual Enrollment Courses	24%
AP Course and Exam with Average Exam Score of 2	32%
AP Course and Exam with Average Exam Score of 3	44%
AP Course and Exam with Average Exam Score of 4 or 5	50%

Note. Adapted from "AP and dual enrollment: Options for schools and students" by College Board, 2009.

Table 6 indicates that students taking an Advanced Placement course and earning a score of 1 or 2 on the AP exam approximately double their chances of graduating with a bachelor's degree in four years over those who take no AP courses. While research suggested that an AP exam grade of three or higher is consistently predictive of students'

college success, students scoring one or two on the AP exam also benefited over the non-AP group. Additional research, conducted by National Center for Educational Accountability (2006), determined that Latino students in Advanced Placement courses scoring a 3 or higher on the AP exam have a 28% higher chance of graduating college with a bachelor's degree in five years or less as compared to matched non-AP students.

Misconceptions regarding the benefits and purpose of the Advanced Placement program as a whole could be perpetuating the Latino students' concerns and fears surrounding the AP program at Pioneer High School. In sharing about what could be done to increase AP enrollments, Angelina (G8) stated:

Don't scare kids as much. I feel like we scare them by saying how hard these classes are and how much work we put into them. But I feel like kids don't want to take that extra step so that's why we don't have so many people in AP classes.

Conveying information about the added benefits of AP participation to Latino students and families could potentially incentivize AP enrollments and alleviate some fears surrounding AP participation. Concerted efforts by the school to assure that all students and their parents have access to accurate and complete information about the benefits of the Advanced Placement AP program could support increased equity in program enrollment at the school.

Ability Tracking and Advanced Placement Program Preparation

Differing responses from Latino and White participants about how teacher recommendations influenced their Advanced Placement enrollment could indicate that some teachers at Pioneer High School may not believe that all student groups are equally qualified for AP program participation. Cammarota (2006), Mickelson (2003), and

Noguera and Wing (2006) believed that lowered teacher expectations resulted in unequal academic outcomes for Latino students. Staff beliefs about which students at the high school belong and which students are excluded from participation in rigorous courses may negatively affect Advanced Placement program access for Latino students.

Focus group responses regarding early honors enrollments resulted in further research into each participant's course enrollment trends. In this case, early enrollment is defined as enrollments that occurred during a student's freshmen and sophomore high school years. The College Board (2012) recommended that, to prepare students for successful completion of an AP course, opportunities for enrollment in rigorous courses should be available to all students. Yet, research into the participant's school records revealed significant differences in the Latino and White participants' freshmen and sophomore honors course enrollments. Data presented in Chapter IV revealed that nine Latino participants were enrolled in 23 sections of honors classes as compared to the 42 sections of honors class enrollments experienced by the eight White participants.

As discussed in Chapter I, early enrollment into honors courses may provide advantages over students in less rigorous courses (Lleras, 2008). For instance, AP Latino participants had lower grades in AP classes, lower scores on AP exams, and enrolled in fewer AP courses as seniors when compared to the White participants in the Advanced Placement groups. Since the Latino and White participants were matched by GPA and AP enrollment status, the substantial differences in AP grades, AP exam scores, and future AP enrollments could be due to inequitable early honors enrollment practices experienced by the Latino participants at Pioneer High School.

How do Pioneer High School students enroll in their courses? According to the course description catalogue at Pioneer High School, math, language arts, science, and social studies were considered core subjects. These core subjects were the only courses that had regular or honors level status. When registering for courses using the school's online system, freshmen and sophomore students had autonomy in elective course selection. However, the core courses were automatically entered into students' electronic files. According to district procedures, regular level courses were automatically placed into students' schedules and any changes in core course selections, such as changing from regular to honors level, required approval from an administrator.

The process of requiring administrative approval for changes in online course registration may inhibit Latino student enrollment in early honors courses. Gándara and Contreras (2009) explained that high poverty Latino youth were routinely placed in tracks that resulted in significantly slower and less rigorous curriculum paths in early grades. Consequently, these students begin to see themselves as "slower and not as smart as" students assigned to higher ability curriculum (Gándara & Contreras, 2009, p. 97). Therefore, Latino students automatically placed in lower level curriculum tracks could believe that they have lower abilities and may not be inclined to personally advocate for placement in advanced ability courses. A change in registration practices could support a more equitable model.

Teacher Recommendations and Advanced Placement Enrollment Policies

According to school registration policies at Pioneer High School, junior and senior students have more autonomy in their core course selections than they did as

freshman and sophomores. Depending on their interest area, juniors and seniors are allowed to pick courses listed in the course catalogue. Nevertheless, students interested in enrolling in an AP class must obtain a signature from an AP teacher prior to being eligible for an AP class. Although both Latino and White AP and non-AP participants clearly understood the AP registration policy, differing responses from each group indicated opposing experiences in obtaining teacher signatures.

White AP participants generally believed that obtaining an AP teacher's signature was a simple process, and that teachers typically approved students' requests for enrollment. When Natalie (G4) was asked about the process for AP enrollment, she stated, "You have to have an approval from a teacher. Usually they are very willing. They want everyone to at least try which is cool." Baker (G4) confirmed that students need teacher approval for AP enrollment but believed the approval was easy to obtain. He stated, "They basically know who you are and, if they think that it would be too hard for you, they will suggest a little easier class. But they do want to push you." However, with approximately 1,400 students at the school, it is unlikely that AP teachers know the capabilities of all students.

Not all participants believed that teachers easily approved AP enrollments. One non-AP White participant and most Latino participants discussed instances of rejection when they themselves or friends attempted to obtain a signature from an AP teacher. Jodie (G1) stated that she believed enrolling in an AP course was difficult. She claimed, "I've heard they [AP classes] are really hard to get into and that you also have to get a teachers signature to do it." Although she thought that some teachers encouraged eligible students to enroll in Advanced Placement classes, Jodie confessed that she had never

been asked by a teacher to enroll in an AP class and was not confident in her ability to even pass an Advanced Placement course.

Similarly, Ricky (G6) shared an experience his friend had while attempting to obtain an Advanced Placement teacher's signature. Ricky explained:

When we chose our classes for next year, they [a staff member at the school] showed you the class number and what the class was and the teacher. And if it was AP, the teacher had to sign to see if you were capable of taking that class. I went with my girlfriend. When she went to get her paper signed there was a person there and he was going to take AP psychology and AP something else. He was going to take two AP classes and then [*teacher name omitted*] didn't let him because he said he needed at least one or two off blocks.... He [the teacher] didn't sign his paper. So the teacher actually decided if you can take the class or not. In sharing why some students may be apprehensive about obtaining an AP teacher

signature, Mariana (G6) believed that some students might be afraid or too shy to talk to the AP teacher about the required signature. Juanita (G7) felt that the acquiring a teacher signature was a good way for students to find out what was expected of AP students. However, she also explained that, depending on the teacher, some AP class approvals were more difficult to obtain than others. Juanita further described that she went to get permission for enrollment from a particular AP teacher and the teacher told her that she would probably not do well in the AP class. Subsequently, Juanita did not enroll in the AP class.

None of the White Advanced Placement participants shared concerns that the required signature was difficult to obtain, nor did they share examples of rejection. In contrast, Latino Advanced Placement participants cited instances that indicated the process of requiring AP teacher signatures was intimidating or difficult. The College Board (2012) recommended that schools remove barriers which limit access for underserved groups. Requiring a teacher's signature for AP enrollment empowers

individual teachers to make decisions about a student's AP course eligibility. The practice of requiring a teacher's signature could potentially inhibit AP enrollment for Latino students and lead to additional feelings of incompetency among rejected students.

Study Session and Support Opportunities

Data revealed that Latino participants may not have been able to access study sessions provided by AP teachers at the school. Some of these study sessions were offered after school hours at local restaurants, and Latino participants, most who are high poverty, may not have been able to attend because they had no transportation or no discretionary income available to purchase food. Tutoring sessions were also offered after school, but Latino participants indicated that few students attended the sessions. Students riding the bus home may not have had other options for transportation, and, therefore, were unable to access tutoring support. Inadequate support structures imbedded into the school day may create barriers for Latino students who are interested in successfully completing an Advanced Placement course, but have no means of receiving extra help.

Inadequate preparation for AP enrollment in early years, a lack of self-confidence, and fears of failure may indicate a need for the development and implementation of authentic support structures that provide assistance to Latino students who are interested in the Advanced Placement program, but who are apprehensive about enrollment. The term "authentic support" is simply defined as support that is accessible to all students, builds self-confidence and uses peer interaction, and complements rigorous course content.

Major findings of this study revealed issues concerning the school's systemic structures which negatively impacted academic experiences for Latino participants. A

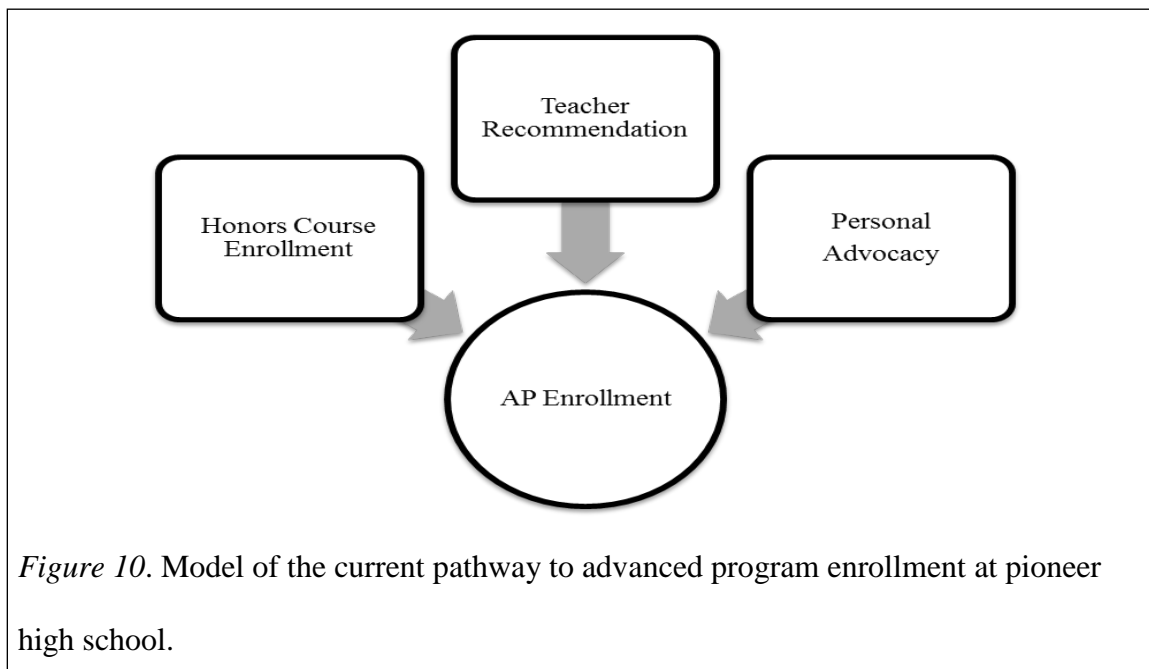
lack of adequate understanding about the reasons for and benefits of AP enrollment, early ability tracking, misaligned teacher recommendations, and inadequate authentic support structures emerged as topics to consider in the development of an equitable alternative model. In considering the meaning of these findings, linking the interrelated pieces of the data in a meaningful way is important to develop an improved model (Merriam, 2009).

Researcher Reflections about the Meaning of the Data

A previous pilot study, conducted in preparation for this research, indicated that the relationship between a teacher and the student was a key component in access to Advanced Placement pathways for Latino students. In this recent study, the role of teachers actually emerged as a barrier for Latino student AP program enrollment. Although participants from Pioneer High School indicated that they liked their teachers, the actions of some of those teachers inhibited Latino Advanced Placement enrollments. The original pilot study failed to include a complete analysis of participant records, which may have revealed inequitable tracking practices. For this study, the participants' enrollment history, supported by data from the focus group transcripts, revealed that school structures likely resulted in differing academic experiences for Latino students, as compared to White students at Pioneer High School.

A model representing the three current pathways to AP enrollment at Pioneer High School as described by the participants is displayed in figure 10. The model in figure 10 explains that the current pathway to AP enrollment at Pioneer High School is through early honors enrollments, teacher recommendation, or individual advocacy. Unfortunately, this model is restrictive for Latino students who are often not placed in honors courses, are not recognized by a teacher as a student with AP potential, or,

because of feelings of inadequacy, do not have the personal determination or resolution to independently enroll in the Advanced Placement program.



Pioneer High School offers a wide variety of Advanced Placement courses in numerous subject areas. The school’s website indicated that AP courses were available in mathematics, English, science, social studies, world languages, art, and music. Within each subject area, assortments of courses offer AP program options to accommodate the various interest areas and career pathways that exist in a diverse student population.

In Colorado, Public Law 109-270 known as the *Carl D. Perkins Career and Technical Education Improvement Act* (2006) established guidelines for state educational reforms regarding the development of individual career plans, called “Plans of Study,” which promote skilled, high-wage professional employment for all secondary school students. The legislation requires Plans of Study to promote graduating educated students

who are prepared for competitive employment in America. Through incorporating a progression of rigorous courses which aligns secondary education with postsecondary education, students are afforded more options after high school graduation. The wide variety of rigorous AP courses meets the requirements for Plans of Study.

In order to equitably provide access to Advanced Placement courses for Latino students, a new enrollment model must be considered. Merriam (2009) explained that a researcher must move beyond the data and connect the themes that emerged by using a visual model to explain the findings. Inherent in the development of a new model is the researcher's role in making inferences toward possible changes (Merriam, 2009). The data uncovered disproportionate enrollments in early honors classes and inequities in Advanced Placement program enrollment practices. This new model incorporates a plan to combat "sources of resistance" within schools that restrict high levels of learning to a select few (Schlechty, 2002, p. 88). An alternative model, based on the themes that emerged from the data, would include the following:

- a comprehensive system of informing all parents and students about the access to and benefits of the Advanced Placement program;
- unbiased open enrollment policies without restrictions for any student interested in registering for an Advanced Placement course;
- authentic academic support available to all students requiring extra assistance to be successful in rigorous courses; and
- career counseling that encourages goal setting and the completion and implementation of Plans of Study.

The findings from this research could help educational leaders at Pioneer High School better understand the sources of resistances within the school structures and implement a more equitable model.

Personal Views as Compared to the Literature

Topics discussed in the literature that negatively impacted Advanced Placement enrollments for Latino students included an uninformed populace, issues connected with poverty, biased tracking policies, inadequate support structures, and lowered teacher expectations. While similar issues emerged from the data in this study, the importance of acknowledging that these issues exist at Pioneer High School and finding the courage to implement change brings meaning to this study. Leadership at the participating school may use the results of this study to make informed decisions to change the status quo and ensure that equitable academic opportunities are accessible to Latino students. In addition, district leadership may use these results to implement significant changes at other secondary schools in the system.

Positive changes within whole systems are possible. After a decade-long study in Maryland, Childress (2009) determined that by implementing a few key elements within the district's system, the high schools doubled the number of minority students passing the AP exams. Those elements included:

- implementing rigorous academic standards with differentiated instructional practices for all students in elementary school through high school;
- building intentional structures within the culture of the entire school system that reinforce academic equity and high expectations for all students;

- confronting the negative academic effects that connect teacher beliefs about race and classroom practices; and
- building capacity in the schools and the community to ensure that all students have access to rigorous content.

As in the Maryland study, the need for changing belief systems also emerged in this study. However, changing beliefs is a complex process. Singleton and Linton (2006) explained that, while most educators believe that “racism is morally wrong,” few educators are “truly willing and prepared to address the racial achievement gap head-on” (p. 2).

Suggestions for Educational Leaders

To encourage Latino student Advanced Placement program enrollment, the data indicate a clear need for an alternative plan that includes systemic changes. Before parents and students can prepare a foundation leading to AP enrollment, informed decisions by school leaders are necessary. During AP course participation, systems must be in place to maximize student learning. After the completion of an AP class, students need help in taking critical next steps. An outline of the before, during, and after AP process will help school principals implement changes toward a more equitable model.

Before. Long before Latino students enroll in the Advanced Placement program, steps must be taken to assure that they are given the opportunity to prepare for success in future Advanced Placement courses. These steps include:

- providing complete access to information for students and parents about the Advanced Placement program;

- implementing equitable registration policies that allow any interested student to enroll in early honors classes and Advanced Placement classes;
- changing the role of teachers in the honors and Advanced Placement course registration process; and
- increasing the role of counselors in helping students make intentional course decisions that lead to postsecondary options.

Research and results indicated that Latino parents and their children are unaware of differentiated course options and often do not advocate for advanced enrollment opportunities. Specifically, Latino parents and students experience a general lack of knowledge and understanding about the pathways to Advanced Placement program enrollment and the benefits of enrollment in the AP program. Therefore, a comprehensive plan to promote knowledge and understanding of the pathway to Advanced Placement program enrollment should be implemented. Prior to high school enrollment, all parents and students should be provided with a comprehensive understanding of how Advanced Placement enrollment connects with postsecondary attainment and career goals.

Prior research and results of this study indicated that Latino students have fewer early honors enrollments as compared to White students. Less exposure to rigor results in lower enrollment and lower academic success in Advanced Placement programs. Therefore, the implementation of an equitable registration policy that informs students about honors class options and allows for open enrollment to any student interested in taking an honors course should be considered. In addition, requiring teacher signatures for AP enrollment presents a barrier to some Latino students. Registration in AP courses

should not be discouraged by teachers. Instead, a concerted effort to recruit all interested students into AP classes should be implemented.

Research and results indicated that underlying biased teacher beliefs about the goals and capabilities of Latino students negatively impacts Latino enrollment in honors and Advanced Placement courses. Therefore, professional staff development should be provided to support changes in the way teachers influence the academic choices of Latino students. Inherent in this staff development should be the utilization of Latino student data to support critical conversations about inequitable academic practices and the promotion of open access to rigorous opportunities for all students.

During. To assure that Latino students are enrolled in Advanced Placement courses and any rigorous courses leading up to AP enrollment, they must have access to the help they need to be successful. Therefore, authentic support structures must be developed and implemented. Within this structure of support, differentiated instructional practices should be implemented to assure that all students have an opportunity to understand the daily lessons.

Research and results indicated that high poverty Latino students may require additional support in understanding higher-level concepts and academic vocabulary inherent in honors and Advanced Placement courses. However, a lack of differentiated instructional practices in the classroom and limited access to authentic support opportunities negatively impacts the academic achievement of Latino students. Providing differentiated instructional practices in the honors and AP classroom, which promote critical thinking and rigor for all students and the development of authentic support structures, is needed to increase the academic success of Latino students enrolled in

honors and AP classes. Figure 11 represents a Response to Intervention and Instruction (RtI²) model which, in addition to helping students learn through varying levels support, focuses on quality first instruction at the tier-one level.

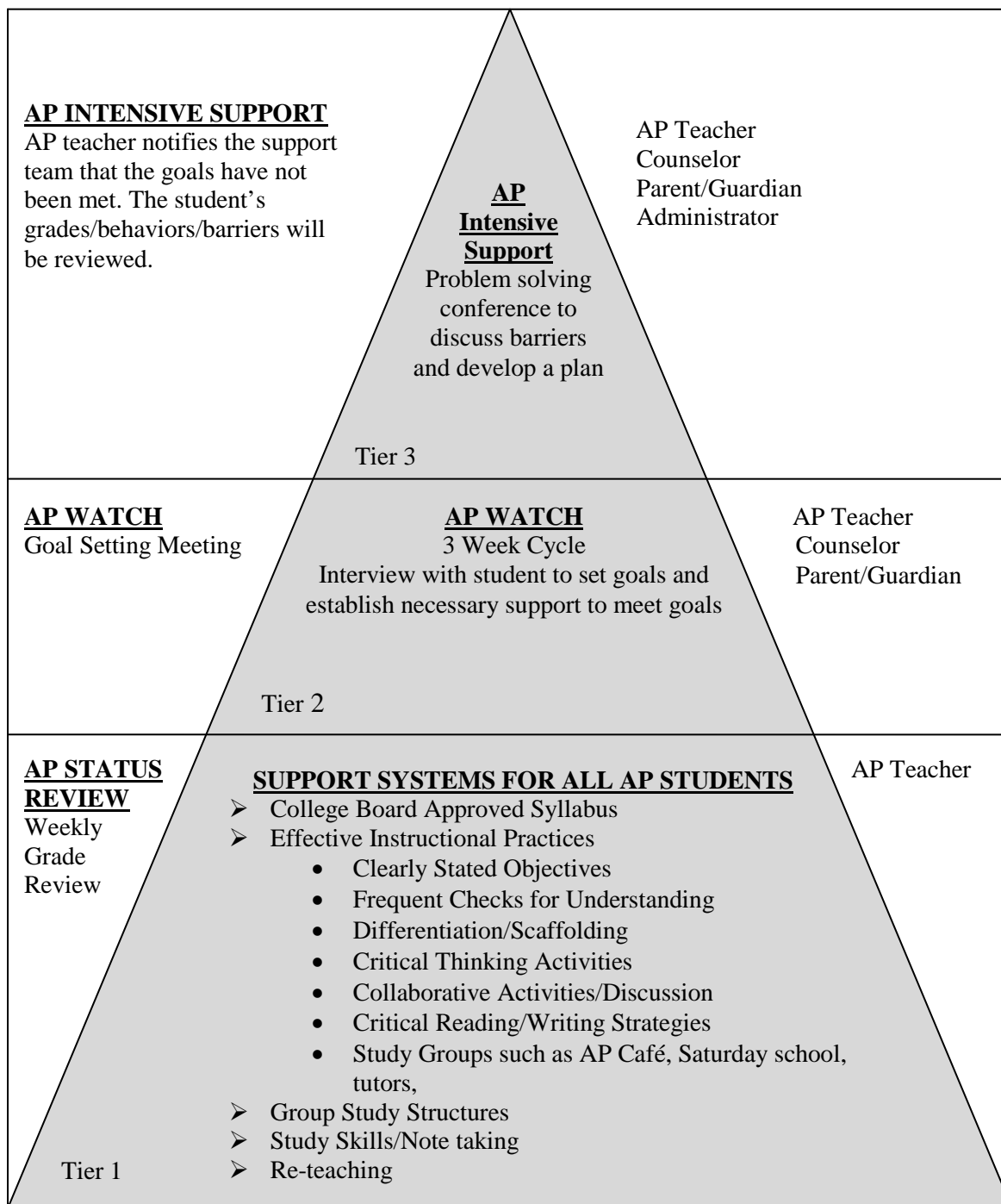


Figure 11. Response to intervention and instruction for advanced placement support. Adapted from Dickman, G. E. (2006). RtI and reading: response to intervention in a Nutshell. *Perspectives on Language and Literacy, Special Conference Edition*. International Dyslexia Association: Baltimore, MD. Retrieved from <http://www.readingrockets.org/article/14596/>

Dickman (2006) referred to a Response to Intervention model which implements a three-tiered approach in supporting academic success for students. The inclusion of the word “instruction” into this model emphasizes the importance of providing lessons that help all students learn at higher levels. Figure 11 displays a three-tiered RtI² model, where each tier represents increasing levels of support.

Tier 1 represents researched based quality instructional practices that are delivered to all students by qualified teachers. Instead of assigning difficult work to encourage students to drop the course, this RtI² model requires teachers to implement researched-based instructional strategies that will support student achievement. Schlechty (2002) explained that teachers need professional development in curriculum and assessment design in order to provide students with rigorous and engaging instruction. With proper tier 1 instruction, 80% of the students should be successful without additional support. The 20% of students needing additional support move to tier 2.

Tier 2 represents an increased level of support that, along with the teacher, counselor, and parents, helps the student set goals and assists the student in receiving additional academic help beyond tier 1. At a tier 2 level, students may spend additional time with the teacher, enroll in a tutoring program, receive extra support materials, learn additional study skills, or implement a variety of other interventions that fit the needs of the individual student.

For the few students that typically require further help, Tier 3 represents an intensive level of support that reviews all of the issues impacting the struggling student and assists him or her in developing a plan of support. In tier 3, a team that includes teachers, parents, counselors, and a school administrator, helps the student in making

quality decisions about the type of concentrated help he or she needs to be successful in class.

This RtI² model would assist any Latino AP students requiring additional support structures. For successful implementation of this multi-tiered system of support, schools must develop the authentic support structures needed for tier 2 and tier 3. In addition, a school culture that encourages the consistent use of the model must be cultivated.

After. After the successful completion of an AP class, Latino students should be supported in making informed decisions about their next steps. The development of an intentional structure that helps students modify their Plans of Study and provides assistance in goal setting could motivate and encourage enrollments in additional AP courses. The implementation of a reward system that acknowledges all AP students for their AP participation could reinforce the importance of enrolling in challenging courses and send accurate and positive messages about the AP program to potential future Advanced Placement students.

In conjunction with Plans of Study, schools should be intentional about presenting a college-going culture. At Pioneer High School, the trophy cases were full, and pictures of the sports teams were displayed in the hall. However, the bulletin boards were often empty and the halls were devoid of student work. Although displaying athletic successes is important in the school, displaying academic successes is equally important. For example, acknowledging students who are awarded college admittance and college scholarships could help promote a culture of academic excellence. Exhibiting exemplary student work or displaying information about study sessions and tutors could also encourage students to focus on academic achievement.

Limitations of the Study

Creswell (2005) explained that “limitations are potential weaknesses or problems with the study identified by the researcher” (p. 198). Furthermore, disclosing limitations can be helpful to determine if the research findings can be generalized to other locations and to any future research studies that may replicate a similar process (Creswell, 2005). Limitations in this study include the sample size and researcher bias.

The initial design of the study included eight groups of students with four students in each group. Since the focus groups were held during summer break and not during school hours as initially planned, convincing students to attend was challenging. Although all eight groups were represented, in some cases the sample sizes were smaller than desired. Low student participation limited the scope of qualitative information for this study. However, the numbers of White and Latino participants were approximately the same; each of the Latino groups had two or more participants, and the numbers of AP participants were higher than non-AP participants for both White and Latino groups.

The project goal was to determine ways to open Latino student access to Advanced Placement programming as compared to White students. Having multiple Latino students in each group spurred deeper conversations and helped to better understand the experiences of Latino students. Attracting larger numbers of AP participants was helpful in determining differences in the pathways of Latino students and compared to White students. Future research in this area may experience higher levels of participation by holding focus groups during school hours.

Although addressed earlier, potential researcher bias is a limitation that must be acknowledged. Preconceived subjectivities regarding teacher belief systems may have

influenced final results and conclusions. However, the research findings and subsequent recommendations were based on the data from participants' statements and confirmed using school records.

Recommendations for Future Educational Research

The analysis of this study found that inequitable systemic practices at Pioneer High School inhibited access to Advanced Placement programs for Latino students. Additional research could support further understanding into the ways that Latino students access Advanced Placement courses. Based on the limitations and the final results, the following future research recommendations are presented to support additional inquiry into issues of academic inequity for Latino students:

1. Extend this study to determine effective ways to provide Advanced Placement program information to parents and students. Questions regarding how early the information should be delivered and ways to effectively provide information to all parents and students should be addressed.
2. Extend this study to determine effective registration policies. Questions regarding how students and parents make informed decisions in selecting high school courses should be addressed.
3. Extend this study to determine how Advanced Placement courses are connected with Plans of Study. Questions regarding how Advanced Placement courses are promoted with respect to Plans of Study should be addressed.
4. Extend this study to determine effective methods of providing authentic support structures. Questions regarding how time during the school day could be scheduled to include access to academic help should be addressed.

5. Extend this study to determine how counselors can better support rigorous academic pathways and high school graduation. Questions regarding how encouraging easier classes impacts the self-perception of high school students should be addressed.
6. Extend this study to determine ways to support new students who enroll in rigorous honor and Advanced Placement courses without previous experience in courses with high-level expectations.
7. Extend the study to include a larger sample size of White and Latino Students. Participant surveys and academic data could be used to form the basis of a more comprehensive quantitative study about Latino student Advanced Placement participation.

Conclusion

To sustain a healthy economy, America needs educated high school graduates who are prepared for post-secondary education options. High Schools should provide all students with the opportunity to enroll in rigorous programming, such as the Advanced Placement program, to support college and career readiness. The wide variety of Advanced Placement courses available offers students the opportunity to prepare for post-secondary success in many different areas of study. Systemic policies and practices within schools should not pose barriers to Advanced Placement course enrollment for any one group of students. In this study, a proposed new model could guide educational leaders towards implementing a more equitable approach in helping Latino students with the tools necessary to enroll in and successfully complete Advanced Placement courses. This new model has the potential to provide the preparation and opportunity for any

students interested in positively impacting their future through Advanced Placement success.

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APPENDIX A

PRINCIPAL PERMISSION LETTER

Principal Permission Letter

[*school name*] High School

I give my permission for Susan Walker to utilize [*school name*] High School for the purpose of conducting eight focus group interviews to study the underrepresentation of Latino students in Advanced Placement courses. I understand these focus groups will provide data for a research project being prepared for a dissertation at the University of Northern Colorado and this study follows the Institutional Review Board's stringent guidelines for research. I understand that the focus group interviews will be conducted in a classroom or meeting room in late spring of 2012. Susan Walker will complete the appropriate building use form. I understand that the following conditions will be followed:

- ✓ Participants of the focus groups will include 32 purposefully selected [*school name*] High School junior or senior students.
- ✓ Interested students will be given both a student agreement and a parental permission form to be signed prior to participation in a focus group.
- ✓ Each agreement-permission form will include a description of the study purpose and an explanation regarding data collection, handling and analysis.
- ✓ Information-permission forms will be printed in both English and Spanish if necessary.
- ✓ Any participant can decide not to participate at any time for any reason.
- ✓ Group norms will be established and followed.
- ✓ The potential risk to study participants is estimated to be far less than any potential risk that study participants might encounter discussing these issues with neighbors, peers or teachers.
- ✓ All information gathered in the focus groups will be kept confidential.
- ✓ Participants will receive a copy of the research findings.
- ✓ This research will have prior approval from [*school district*] and the University of Northern Colorado.

When the research is complete, I would like a copy.

Signed,

[*principal name*] Principal, [*school name*] High School

Date

APPENDIX B
IRB APPROVAL

UNIVERSITY of
NORTHERN COLORADO



Institutional Review Board

May 9, 2012

TO: John Latham
Monfort College of Business

FROM: Maria Lahman, Co-Chair *mt*
UNC Institutional Review Board

RE: Expedited Review of *Barriers to Advanced Placement for Latino Students*,
submitted by Susan Walker (Research Advisor: Spencer Weiler)

First Consultant: The above proposal is being submitted to you for an expedited review. Please review the proposal in light of the Committee's charge and direct requests for changes directly to the researcher or researcher's advisor. If you have any unresolved concerns, please contact Maria Lahman, Applied Statistics and Research Methods, Campus Box 124, (x1603). When you are ready to recommend approval, sign this form and return to me.

I recommend approval as is.

John Latham
Signature of First Consultant

5/9/12
Date

The above referenced prospectus has been reviewed for compliance with HHS guidelines for ethical principles in human subjects research. The decision of the Institutional Review Board is that the project is approved as proposed for a period of one year: *5-17-12* to *5-17-13*.

M-L
Maria Lahman, Co-Chair

5-17-12
Date

Comments:

APPENDIX C
CONSENT FORMS

UNIVERSITY of
NORTHERN COLORADO



**College of Education and Behavioral Sciences
Educational Leadership and Policy Studies
Minor Assent Form**

Hi! My name is Mrs. Walker and I am a coordinator in [*school district*]. I am also a doctoral student at the University of Northern Colorado. I am conducting research on the academic achievement of students at [*school name*] High School. That means I study reasons students are successful or are not successful in their high school experience. I am hoping you will want to be one of the students I talk with.

If you choose to participate, you will be asked some questions about student achievement in high school classes. You will not be alone in the discussion. There will be three other [*school name*] High School students participating in the discussion. The group will be small. We will meet at [*school name*] High School. This is not a test and there is no right or wrong answer to the questions and your opinion and ideas are important. I will record what you say, but I will keep your name confidential when I write my report. It will take about one hour for you to answer questions about your classes.

Talking with me will probably not help you or hurt you. Grades in your classroom will not be higher or lower because of your participation. Your parent's also must give their permission for you to talk with me, but you do not have to. It's up to you. Also, if you say "yes" but then change your mind, you can stop any time you want to. Do you have any questions for me about the research?

If you want to participate in this research and talk with me about achievement issues in your school, sign your name below and write today's date next to it. Thanks!

Student

Date

Researcher

Date

UNIVERSITY of
NORTHERN COLORADO



**College of Education and Behavioral Sciences
Educational Leadership and Policy Studies
Parental Agreement and Permission Form**

Project Title: Pathways to Advanced Placement

Researchers: Susan Walker, Graduate Student Educational Leadership and Policy Studies
Department

Phone Number: (970) 302-5933

With the help of several [school name] High School students, I am conducting research on the academic achievement of students at [school name] High School. If you grant permission and if your son or daughter indicates to us a willingness to participate, I will meet with students in small focus groups. The focus group interviews will be held at [school name] High School during the school day at an agreed upon time. The interviews are expected to last about one hour so that each participant will have an opportunity to share his/her perspectives. Prior to each focus group interview, norms will be set and confidentiality issues will be discussed in both English and Spanish if needed.

I foresee few risks to participants beyond any potential risk that study participants might encounter discussing issues of high school academic achievement with family members, neighbors, peers, or teachers. The questions will not be difficult or intimidating and could generate interesting and insightful conversation between participants. There is a very small risk of emotional and/or psychological upset associated with discussing these issues in a group setting. However, this is considered to be a minimal risk which will be addressed through investigative neutrality and assurances offered to participants through a discussion of group and confidentiality norms and data handling procedures. Potential benefits could include validating student voices in the process of informing educational leadership regarding the development of policy, procedure, and programming specific to student achievement at [school name] High School. Participants will play a role in introducing procedural guidelines that could create viable pathways to academic success for students in [district name].

I will record the participants' conversation to back up the notes taken during the focus groups. Be assured that I intend to keep the contents of the audio-tapes and the notes private. To further help maintain confidentiality, full names will not be used and names will not appear in any professional report of this research. As soon as the transcriptions of the recordings are completed, the recordings will be destroyed. All transcriptions will be kept in a locked cabinet. When the report is completed, you will receive a copy of the final document.

Please feel free to call me if you have any questions or concerns about this research. Keep a copy of this letter for your records.

Thank you for assisting me with my research.

Sincerely,

Susan Walker

Participation is voluntary. You may decide not to allow your son/daughter to participate in this study. If a student begins participation, they may still decide to stop and withdraw at any time. Their decision will be respected. Having read the previous page and having had the opportunity to ask any questions, please sign below if you give permission for your son/daughter to participate in this research. A copy of this form will be given to you to retain for future reference. If you have any concern about your son/daughter’s treatment or selection as a research participant, please contact the Sponsored Programs and Academic Research Center, Kepner Hall, University of Northern Colorado, Greeley, CO 80639; 970-351-1907.

Student’s Full Name
(month/day/year)

Student’s Birth Date

Parent/Guardian Signature

Date

Researcher’s Signature

Date

APPENDIX D

INTERVIEW GUIDELINES AND QUESTIONS

Focus Group Interview Norms and Confidentiality Guidelines

Group Norms

- The interview moderator will ask a series of 6-8 questions one question at a time. Each participant will have a turn to answer the first question before the second question is asked. Each participant will have a turn to answer the second question before the third question is asked and so on through each of the questions. Each student will be given a number and the participant starting order will systematically change from question to question.
- The questions will be free response with no right or wrong answers. I am looking for each of you to share your own thoughts and feelings and not what you think the researcher wants to hear.
- Only one person at a time can talk (everyone needs to hear what is being said).
- At the end of each question, participants will be asked to summarize what they heard and share any additional comments.
- Please try to answer every question without passing or skipping. However, you are free to pass if for any reason you are not comfortable answering a question.
- Please try not to name anyone by name during the interview. Instead use descriptors (i.e. the principal, the counselor, my math teacher, my friend, etc.).

Confidentiality Guidelines

- Your participation here today is completely voluntary. If at any point, you become uncomfortable or want to withdraw from participation you are free to do so. Simply raise your hand and indicate that you would like to be dismissed. If necessary, we will stop recording to allow you to gather your belongings and leave with no questions asked.
- Be assured that your participation or your withdrawal here today will in no way affect you as a student at this high school. Your participation or your withdrawal will be kept strictly confidential and there will be no impact to any course grade at this high school. Your help in gaining an understanding about the factors that both enhance and impede student enrollment in Advanced Placement coursework at this high school is appreciated.
- Everything that is shared by another person during this interview must stay here. You may share your own thoughts and feelings after you leave here today. **You may not share the thoughts or feelings of others outside of this interview session.**
- This interview will be digitally recorded. The digital recording will be destroyed after it has been transcribed by an outside and confidentiality-bound transcriber. The digital recording and the transcript will be stored in a locked file cabinet. Following transcription, only the researcher and two University of Northern Colorado professors will have access to the digital recording and the transcript.

AP Student Focus Group Interview Questions and Format

Prior to the start of the interview, the researcher will briefly discuss the Risks-Benefits portion of the assent and consent forms as well as the Focus Group Norms and Confidentiality Guidelines.

Opening Question	Please introduce yourself with your first name only and share one thing outside of school that is important to you or that you are interested in.
Transition Question	What is your overall experience as a student at this high school?
Key Question/s <i>Following each question, participants will be asked to summarize what they heard and add additional comments.</i>	Did anyone encourage you to enroll in an AP course at this high school? From your perspective, what are the ways that students access enrollment in AP coursework at this high school? Final summary statements will be shared.
Sub Question 1 (if not addressed) <i>If needed, this question will follow the key question as a sub key question.</i>	From your perspective, what are some things that helped you in your AP coursework at this high school? What are some things that made AP participation challenging or difficult? Final summary statements will be shared.
Sub Question 2 (if not addressed) <i>If needed, this question will follow the key question as a sub key question.</i>	From your perspective, what are some factors that cause students to decide not to participate in AP coursework at this high school? What are some fears about participating in AP courses? Final summary statements will be shared.
Sub Question 3 (if not addressed) <i>If needed, this question will follow the key question as a sub key question.</i>	What do your friends say about enrolling in advanced courses while in high school? What do your parents say about enrolling in advanced courses while in high school? Final summary statements will be shared.
Main Issue Question	Of all the issues discussed here this afternoon which one is the most important to you?
Final Question	Is there anything about student enrollment in AP coursework that we should have talked about but did not?
Closing Remarks	The researcher will explain the review and confirmation process and will confirm participant interest in receiving a summary of the research findings.

NOTE: 1) go around with opening question; 2) go around with transition question; 3) one by one ask key question, pursue sub-questions as necessary; 4) allow each participant to summarize and comment after each question; 5) go around with main issues question; 6) finish interview with final question asked to group as whole; 7) explain the transcript review process as voluntary. Extend appreciation and dismiss group.

Non-AP Student Focus Group Interview Questions and Format

Prior to the start of the interview, the researcher will briefly discuss the Risks-Benefits portion of the assent and consent forms as well as the Focus Group Norms and Confidentiality Guidelines.

Opening Question	Please introduce yourself with your first name only and share one thing outside of school that is important to you or that you are interested in.
Transition Question	What is your overall experience as a student at this high school?
Key Question/s <i>Following each question, participants will be asked to summarize what they heard and add additional comments.</i>	Has anyone encouraged you to enroll in an AP course at this high school? From your perspective, what are some things that discouraged you from taking high school AP courses? Final summary statements will be shared.
Sub Question 1 (if not addressed) <i>If needed, this question will follow the key question as a sub key question.</i>	From your perspective, what are the ways that students access enrollment in AP coursework at this high school? What are some things that made AP participation challenging or difficult? Final summary statements will be shared.
Sub Question 2 (if not addressed) <i>If needed, this question will follow the key question as a sub key question.</i>	From your perspective, what are some factors that cause students to decide not to participate in AP coursework at this high school? What are some fears about participating in AP courses? Final summary statements will be shared.
Sub Question 3 (if not addressed) <i>If needed, this question will follow the key question as a sub key question.</i>	What do your friends say about enrolling in advanced courses while in high school? What do your parents say about enrolling in advanced courses while in high school? Final summary statements will be shared.
Main Issue Question	Of all the issues discussed here this afternoon which one is the most important to you?
Final Question	Is there anything about enrollment in AP coursework that we should have talked about but did not?
Closing Remarks	The researcher will explain the review and confirmation process and will confirm participant interest in receiving a summary of the research findings.

NOTE: 1) go around with opening question; 2) go around with transition question; 3) one by one ask key question, pursue sub-questions as necessary; 4) allow each participant to summarize and comment after each question; 5) go around with main issues question; 6) finish interview with final question asked to group as whole; 7) explain the transcript review process as voluntary. Extend appreciation and dismiss group.